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This study examined within-society variability in attitudes and practices in handling authority issues among a sample of 694 adolescents and their parents residing in southern China. Major patterns of parental attitudes towards decision authority, parenting practices, adolescent attitudes towards decision authority, and reasons for adolescent conformity across the seven issues (dating, internet café, homework, going out, chores, drugs, and peers) were identified via latent class analysis. Configural frequency analysis suggested that parent and adolescent subgroups represented by compatible patterns tended to go together, and compatible parent–child combinations tended to be associated with less disagreement. In addition, within-society variability was also explored from the perspective of social class variability. Finally, adolescent academic achievement was only predicted by child characteristics, but not parental characteristics, and adolescent social competence was barely predicted by indicators of the attitudes and behaviors displayed in parent–child relationships when handling authority issues. Findings were discussed in reference to within-society variability in cultural beliefs and practices represented in everyday lives.

ATTITUDES AND PRACTICES IN HANDLING EVERYDAY AUTHORITY ISSUES  
AMONG PARENTS AND ADOLESCENTS IN  
CONTEMPORARY CHINA

By

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To my husband Xizhen, without whose encouragement

I may never have set off on this odyssey;

and

To my children Zoe and Max, without whose inspiration

I may not have been able to endure it.

## APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of  
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## **CHAPTER I**

### **INTRODUCTION**

As Chinese children and adolescents, especially those residing in industrialized urban areas, are increasingly exposed to western values related to individualism through modern media and convenient travel (Xi, 2006), concerns have been growing among scholars and popular media in China regarding the erosion of traditional “Confucian notions” of social hierarchy, conformity, and role responsibilities (Chen, 2005; McIntyre & Zhang, 2003; Xinhua News Agency, 2007). A perceived association between “western values” and adolescent rebelliousness, school misconduct, and lack of motivation for academic achievement among adolescent children (Feldman, Rosenthal, Mont-Reynaud, Leung, & Lau, 1991) has further stimulated debates about whether Confucianism needs to be (re)promoted so as to guide “proper” parenting and parent–child interaction for Chinese people (e.g., Kuo, 1998).

Despite the rhetoric, such debates are largely based on speculative knowledge in much of the Western human developmental literature about the presumed influences of Confucianism on parent–child relationships in Chinese families. In fact, research and theoretical writings on Confucianism in China in general presume that Chinese people live in ways prescribed in Confucian philosophical teachings (Hwang, 1999, 2001). For example, the principles of Confucianism suggest that subordinates in the social hierarchy should respect and obey authorities, and authorities are charged with greater

responsibilities and granted disproportionate social advantages and resources. More specifically, the parent–child relationship is a family-level example of such authority–subordinate relationships. As such, researchers like Ho (1986) and Wu (1996) tended to characterize parent–child relationships in China as conforming to Confucian prescriptions by upholding obedience to authority as an essential socialization goal. According to those researchers, the Confucian notion of authority emphasizes authoritarianism in both public and private domains. Nevertheless, it is not clear to what extent such images of Chinese family socialization fit contemporary urban Chinese families.

It is common for researchers to conceptualize their studies of Chinese family socialization against the backdrop of Confucian influences based on the assumption that Confucianism is espoused by Chinese people in general (e.g., Shek, 2005; Wang & Supple, 2010; Wu, 1996). Findings from these studies have either suggested that children benefited from the rigid management of traditional parents or that the younger generation seemed to identify less with traditional Confucianism and more with Western values such as independence and autonomy.

The depiction of harmonious Confucian families as the norm in China, however, should be challenged. First, recent research has suggested that negativity in relationships between authorities and subordinates, whenever it arises, tends to be dismissed as irrelevant because it is denounced by orthodox Confucianism as wrong or immoral (Ho & Ho, 2008). Hence, tension and violence in the relationships between authorities and subordinates are not publicly acknowledged, and dissatisfaction with authorities is not publicly voiced. Second, there are multiple layers of meaning in the term Confucianism,

and Confucianism as a school of philosophy has evolved historically (Wang & Anderson, under review). In addition, the social actualization of Confucianism diverges significantly from its philosophical discussion. That is, what people think and do in their everyday lives does not necessarily correspond to the philosophical ideals of Confucianism, even though these people might still subscribe to “Confucianism” as a core belief system.

As such, research studies on Chinese family relationships based on the assumptions of harmony and hierarchy associated with Confucianism are compromised by the following limitations. First, there is a lack of clarity and specificity in the definitions of the term “Confucianism” and its associated constructs; although it is frequently used generically to refer to values in hierarchy, obedience, harmony, rigidity, and dependence. Second, in studying the associations among parenting, parent–child relationship characteristics, and child development outcomes in any part of Chinese society, more attention needs to be devoted to what people actually think and do in their everyday lives within their particular sociohistorical context. Because most extant research models either take for granted Confucian influences (e.g., Wu, 1996) or adopt hypotheses and measures that are established in the Western research community (e.g., Kim & Ge, 2000), too little research has incorporated constructs, measures, or theoretical orientations tailored to local Chinese viewpoints or practices. Third, the active role of the child in influencing parenting and socialization processes is commonly neglected in the literature involving Chinese populations (e.g., Shek, 2005). Researchers whose research is framed by Confucianism tend to focus on how culture influences, or even determines, individual behaviors, with minimal attention to the role of individuals in shaping their

own outcomes.

To bridge these gaps in the body of research on Chinese family socialization, this dissertation project examines the current, everyday representation of Confucianism in family socialization and its implications for psychosocial outcomes of middle-school adolescents. The research project will assess the beliefs and behaviors associated with a core Confucian notion, authority, among parents and their adolescent children residing in a major industrialized city in southern China. Specifically, this study aims at examining how attitudes and practices related to parental authority are represented in everyday parent–child interactions, how they vary between families of different social classes, and how they are associated with indicators of children’s competence.

### **The Classical Confucian Notion of Authority**

The notion of authority, according to Confucianism, starts within the family. In the family system, authority is assigned solely to parents. The goal of philosophical Confucianism is to provide justification for such a family system historically in an agrarian society, and to identify ways to regulate individual behavior within the system (Feng & Bodde, 1960). In an agrarian society, the most important and valuable asset is the land. On the one hand, farmers follow fixed, predictable seasonal rhythms in cultivating their land. Accordingly, within-family work distribution has to follow the fixed, predictable agricultural cycle. On the other hand, because the land cannot be moved (or exchanged), and because the normative way to obtain land is through inheritance, parents can be assured of old age security as long as they have the power of distributing land among sons. Consequently, individuals need to perform their designated

roles within the family hierarchy to which they belong. In Confucius' terms, whereas parents are charged with responsibilities to educate their children, manage family property properly, fairly distribute family property to the next generation, and ensure prosperity and sustainability of the family, adult children are obligated to tend the needs of senior parents and will inherit family assets. As such, the family as a system is maintained and extended generation after generation in an agricultural society. Confucius the philosopher attached a great deal of philosophical beauty and elegance to a deferential demeanor on the part of children, as well as to the wisdom and moral virtues of the parents (Lau, 1979). In sum, emphasis on parental authority arises from the needs of maintaining an agrarian social system, and classical Confucianism attaches philosophical significance to its existence and functioning.

Filial piety is considered to be the proper response of children towards parental authority. In classical Confucianism (Feng & Bodde, 1960), filial piety constitutes the core of self-cultivation, which is an overarching behavioral code for the literati, the intellectual elite of a society. Confucius asked that individuals not only take care of parents' material needs, but also do so deferentially and sincerely (Lau, 1979). Most importantly, a finely cultivated person should feel that all that is done for parents is pleasurable and arises from natural propensities. According to Confucianism, it is the attitude and consciousness of actions that differentiates parent–child relationships of humans from those of other species. Finally, the graceful behaviors of the literati will set examples for ordinary people and, as a result, the whole society will function harmoniously.

In sum, meritocracy and reciprocity are implicated in the notion of authority in classical Confucianism. Parents, who are in authority positions, are considered to be capable of managing family assets and providing for children. Moreover, parents are obliged to fulfill these responsibilities to claim the legitimacy of their authority. Sincerely respecting parental authority is not only an act of necessity for children, but also an act of virtue, as cultivating filial piety lays the foundation for successful adulthood (Rosemont & Ames, 2009). In other words, filial piety is developed in the process of self-cultivation instead of being induced as a result of heteronomy.

### **The Social Aspect of Confucianism: Filial Piety and Parent–Adolescent Relations**

In recent years, the Communist Party has appealed to the Confucian notion of filial piety to encourage adult children to take care of senior parents (Liu, 1998). In fact, it is stipulated in the Marriage Law that adult children are obligated to provide care and support for parents. In addition, disabled or impoverished parents have the right to request monetary support from their adult children. On the one hand, economic reform in urban areas has left numerous state-owned enterprises dissolved and therefore a great many senior citizens without any prospect of pensions or social security. On the other hand, economic reform in rural areas has deprived senior parents of land ownership, which used to be the ultimate bargaining chip for proper old-age care (Ikels, 2003). In spite of the rapid economic development in the past few decades, the Chinese government has yet to implement a social security policy that guarantees basic livelihood for many, if not most, of its senior citizens. Not surprisingly, the political agenda has resorted to the extended family to fill in the gap in the name of filial piety.



Whereas traditional Confucian prescriptions of family relationships were intended to promote harmony and continuity in the family, the actual family in modern times is far from harmonious (Slote & de Vos, 1998). It is the parent generation, rather than the child generation, that emphasizes the value of filial piety. Young children and adolescents, especially singletons, are far from demonstrating any tendency or willingness to be deferential (Fong, 2004). Deference in the child seems to be forced and rewarded from outside rather than cultivated from within. Overall, the part of self-cultivation in classical Confucianism seems to be neglected in real families. Instead, parent–child relations involve more practical than ideological issues.

Chuang (2005) differentiated classical Confucianism, which involved propriety, communal sharing, and reciprocity in hierarchical relationships, from later development and interpretation of Confucianism which involved primarily dominance–submission relationships. Further, findings suggested that communal sharing, a principle advocated in Western relationship theories as well as in classical Confucianism, helped to promote family harmony and individual well-being, whereas domineering and coercive behavior was unlikely to be beneficial for family relationships. Similarly, Leung, Wong, Wong, and McBride-Chang (2010) found that early adolescents' beliefs in the reciprocal aspect of filial piety were associated positively with self-esteem and social competence, whereas beliefs in the authoritarian aspect of filial piety were associated negatively with self-esteem and social competence. In reference to child-rearing ideals of Chinese parents, Lieber, Fung, and Leung (2006) found that parents believed in the importance of not only filial piety, which was defined as obeying parents and developing a sense of shame in

self-monitoring, but also autonomy granting. On the other hand, Yue and Ng (1999) found that young people tended to endorse high respect for elders but not obedience. Finally, Fong (2004) found that Chinese adolescent singletons struggled to define boundaries between respecting parental authority and upholding personal autonomy, and both adolescent children and their parents were keenly aware of the stark reality of care for elders.

Taken together, parental authority in the relations between parents and adolescent children should not be taken for granted. Chinese adolescent children demand autonomy and independence, and Chinese parents, willingly or not, need to negotiate with their children regarding everyday authority issues, which is not much different what occurs in the typically depicted Western family (Xia et al., 2004). In sum, the uniform image of authoritarian parents and submissive children does not characterize either idealized or practical aspects of filial piety in contemporary China.

### **The Current Study: Within-group Variability**

To study parent–adolescent interaction in everyday lives implies focusing on within-group variability. The traditional Confucian model of authority–subordinate hierarchy might be too simplistic to be representative of parent–adolescent relationships in contemporary China. There are likely to be families who consider Confucianism irrelevant and instead uphold different beliefs and embrace different practices. Therefore, the current study examined within-group variability by identifying subgroups of parents and adolescents that were characterized by distinct attitudinal and behavioral patterns in handling authority issues. Diversity was further explored by examining the manners in

which parent subgroups crossed with adolescent subgroups, how prevalence of particular subgroups varied as a function of social class, and how parent's and adolescents' subgroup membership was associated with adolescent psychosocial outcomes.

Finally, developmental research on contemporary Chinese parents and children remains concentrated in Beijing, Shanghai, Hong Kong, Taiwan, and North America. Relatively little research conducted in other parts of China is directly available to American readers. Therefore, participants from a southern coastal city of Mainland China were recruited. The data collection site has been geographically distant from the central government throughout its local 2000-year history, and more recently has been a regional hub of economic development activities. Thus, variability in attitudes and practices involving parental authority were likely to be more evident than would be found in areas with stronger political ties, or in more Westernized areas of China.

## **CHAPTER II**

### **THEORETICAL PERSPECTIVES**

Several theoretical perspectives will be integrated to form the conceptual framework for this dissertation project. Specifically, the study is informed by (a) the bioecological theory developed by Bronfenbrenner (Bronfenbrenner & Morris, 2006) with an emphasis on the interrelations between process, person, context, and time, (b) the cultural-ecological theory proposed by Tudge (2008) with an emphasis on the linkage between everyday life and culture, and (c) linkage between social class and personality proposed by Kohn (1995).

#### **Bioecological Theory**

##### **Proximal processes.**

As outlined in the bioecological model (Bronfenbrenner & Morris, 2006), meaningful research on human development should incorporate all these four systems: process, person, context, and time. Process is conceptualized as the interaction between person (organism) and context (including close others, objects and symbols, as well as environments at various levels from microsystems to macrosystems), which brings about emergent developmental outcomes.

Processes, more specifically, proximal processes, are considered to be the engine of development and the ultimate focus in research on human development. Two propositions were offered to delineate how development is driven by proximal processes

(Bronfenbrenner & Morris, 2006).

Proposition 1: Especially in its early phases, but also throughout the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as proximal processes. Examples of enduring patterns of proximal processes are found in feeding or comforting a baby, playing with a young child, child-child activities, group or solitary play, reading, learning new skills, athletic activities, problem solving, caring for others in distress, making plans, performing complex tasks, and acquiring new knowledge and know-how (p. 797).

Proposition 2: The form, power, content, and direction of the proximal processes affecting development vary systematically as a joint function of the characteristics of the developing person, and the environment—both immediate and more remote—in which the processes are taking place, the nature of the developmental outcomes under consideration, and the social continuities and changes occurring over time through the life course and the historical period during which the person has lived (p. 798).

Therefore, the focus of the bioecological theory is not any single aspect of development; rather, it is through studying the kind of everyday activities that children are engaged in, namely, proximal processes, that researchers are able to understand development (see Tudge, 2008). Moreover, such everyday activities are constituted by not only all the elements (person, environment, outcome of interest, and time) involved in the proximal processes but also their interrelations.

### **Person.**

The person can be an agent who initiates proximal processes, an audience member who watches the unfolding of an activity, or a participant who is summoned to

join an activity. Therefore, the characteristics of the developing person are an integral part of proximal processes. Three kinds of process-relevant person characteristics, namely, forces, resources, and demands, are expected to influence proximal processes, and hence development (Bronfenbrenner & Morris, 2006).

Forces refer to dispositional characteristics that set proximal processes in motion and sustain them (Bronfenbrenner & Morris, 2006). Difficult dispositions, such as negative reactivity, impulsivity, and aggression, are considered to be developmentally disruptive characteristics. Appealing dispositions, such as curiosity, sociability, and readiness to initiate activities, are considered to be developmentally generative characteristics. These two types of force characteristics set the tone of an interaction because of the focal person's dispositional drives or desires. For example, a baby that cries a lot easily frustrates parents who may find it difficult to remain patient and energetic when trying to comfort the baby. The baby, in turn, might easily pick up the parents' negative emotion and cry even harder. In contrast, a calm, smiley baby is likely to bring happiness and contentment to the parents who are likely to stay positive and proactive in the day-to-day caring for the baby.

Resources refer to biopsychological liabilities and assets that influence the capacity of the organism to engage effectively in proximal processes (Bronfenbrenner & Morris, 2006). Organisimic liabilities include genetic defects, physical handicaps, and severe illnesses. Organisimic assets include knowledge, skills, and experiences. Resource characteristics influence the content of proximal processes. For example, the parents cannot take a handicapped child to play soccer, and a child cannot read by himself or

herself until he or she has plenty of experiences with book-reading.

Demands refer to individual characteristics that invite or discourage (positive) reactions from the environment. Examples include attractive versus unattractive appearance, a crying versus smiling baby (notice the difference between a baby that happens to be crying at the moment and a baby that cries a lot). In other words, demand characteristics play the role of stimulus in proximal processes. Moreover, these characteristics start or deter an interaction without the focal person's intention or effort.

An important implication for the conceptualization of the person factor is to consider the role of the child in influencing his or her own development. According to bioecological theory, the child is never a passive receiver of external influences. Rather, the child brings to the scene of development a set of characteristics that can initiate, deter, alter, or terminate the course of proximal processes. In reference to parenting, child development is influenced not by parenting in and of itself, but by the parent–child relationship in which both the parent and the child are active participants.

### **Context.**

At the most immediate level, proximal processes are situated in the microsystem, which is the environment with which the developing person has direct contact, such as home, school (for those who go to school), and the field (for those who engage in field work). As the most immediate context, the microsystem directly influences the form, content, power, and direction of proximal processes. By engaging in proximal processes, the developing person and his or her partners can also make changes to the microsystem.

The next level is called the mesosystem, defined as comprising the relationships among two or more microsystems. Examples include the relations between home and school, between school and field work, as well as between home and the neighborhood. According to Bronfenbrenner and Morris (2006), the consideration of mesosystem involves taking into account parallel processes taking place in different microsystems.

Next, the exosystem is defined as

The linkages and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which events occur that indirectly influence processes within the immediate setting in which the developing person lives (Bronfenbrenner & Morris, 2006, p. 818).

For example, the linkages between parents' workplace and home constitute an exosystem for the developing child. That is, although the child has no direct contact with parents' workplaces, he or she has direct contacts with parents when they come home from work. To the extent that the proximal processes taking place at home between the child and the parents are partly influenced by the parents' moods, energy level, and available time, which are inevitably influenced by what has happened in the workplace, the parents' workplace indirectly influences the child's developmental outcomes by affecting proximal processes at home.

The macrosystem is where the lower levels of systems are situated. As such, it influences proximal processes and long-term development in an overarching manner. Brenfenbrenner (1993) argued that culture, an example of the macrosystem, affords the structure and content of microsystems as well as the forms of proximal processes. The macrosystem is defined as follows:



The macrosystem consists of the overarching patterns of micro- meso- and exosystems characteristics of a given culture, subculture, or other extended social structure, with particular reference to the developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options and patterns of social interchange that are embedded in such overarching systems (Bronfenbrenner, 1993, p. 25).

As this definition implicates, the historical belief system related to Confucianism, together with the resources and lifestyles related to social class, are all legitimate areas of investigation because they provide opportunities and constraints for proximal processes, namely, parent–adolescent interactions.

### **Time.**

Time can be viewed from two main perspectives. First, time is a key element in proximal processes. For proximal processes to be effective in promoting development, they have to occur regularly over a fairly long period of time. In other words, the everyday activities that children engage in, such as eating with family members, talking with parents, receiving advice from parents, have implications for long-term development, because these activities take place regularly and continue until children do not live with their parents any more.

Second, development cannot be understood unless the researcher takes into account the historical time in which the developing person is located. Urban Chinese children born after the 1990s are likely to experience drastically different life trajectories and social environments compared with their grandparents born in the 1940s. With respect to the proposed study, the focal time is a special historical turning point for China, during which the country is transitioning from a government-planned economy to a

market economy, struggling to reform its political system to catch up with the influx of Western influences on ordinary people's everyday lives, and trying to integrate the development of an industrialized society with thousands of years of agrarian traditions. Thus, it is of particular interest to examine the contemporary notion of authority as is represented in today's everyday parent–adolescent interactions.

### **Cultural-Ecological Theory**

Cultural–ecological theory is a contextualist theory that links culture and cultural change to people's everyday lives (Tudge, 2008). Culture is defined as the values, beliefs, and practices shared by a group of individuals who also share a sense of identity and have an (implicit or explicit) intention to pass on the shared values, beliefs, and practices to the next generation. How tenets of this theory can be applied to the present study is described as follows.

First, culture is infused in everyday activities, including parent–child interactions. People behave in certain ways in their everyday lives because of their taken-for-granted cultural values and beliefs. Reciprocally, cultural values and beliefs are represented in people's everyday activities and lifestyles. For example, to what extent parents believe they have the right and responsibility to lay down rules as a way to influence children's social behavior is infused with cultural meanings. In some cultures conforming to parental rules and expectations is considered to be critical for guaranteeing a successful adulthood, whereas in others it is considered less important. Regardless, people live their lives by doing things in the ways that they take for granted based on their previous and current experiences.

Second, within-society variability is inevitable because each individual belongs to multiple cultural groups simultaneously and different groups may differentially select sets of cultural beliefs, values, and practices to endorse (Tudge, 2008). Social class, determined by one's occupation and education, is an important within-society cultural factor. With the rapid and uneven economic growth in China over the past 30 years, pronounced variability might be expected between parents from various social classes in their occupational and educational experiences. As such, attitudes and practices involving authority issues in parent–adolescent relationships are likely to vary between members of different socioeconomic groups.

Third, considering the person factor in bioecological theory (Bronfenbrenner & Morris, 2006), individuals also act upon cultural influences instead of unilaterally being influenced by culture. Within family, person-to-person variability in endorsement of cultural beliefs and values occurs because children react to parents and their styles of caregiving in a myriad of ways; rather than in just the one way preferred by a parent or culture. At the same time, different parents interact with and respond to their children differentially, setting up person- and dyad-specific chains of action-reaction sequences, and ultimately divergent personal transformations of collective versions of beliefs, values, and practices. For instance, Chinese children's reactions to parental authority might not necessarily be obedience. Also, parents may choose not to parent their children in ways strictly dictated by Confucian principles - even parents who generally subscribe to Confucian ideologies. That is, parenting practices are likely to vary in their implementation details in individual families.

Systematic divergences in cultural values, beliefs, or practices between parents and children both reflect cultural change at the societal level, as well as catalyze and portend future social changes. For example, the beliefs and behaviors of contemporary Chinese adolescents reflect a time when China is transitioning from a closed, planned economy into an open, market economy; new ideas, both foreign and domestic, abound. The beliefs, expectations, and behavior of their parents, on the other hand, reflect experiences with a period of extreme economic hardship and political turmoil, coupled with the more recent period of economic growth, influx of western cultural artifacts, and new openness in social discourse. Examining such potential divergences between parents' and adolescent children's beliefs and practices about parenting offers glimpses into cultural changes that have occurred in urban China over the past few decades.

### **Social Class, Personality, and Parenting**

Kohn's research sheds light on how personality is influenced by one important aspect of the macrosystem, social class (Kohn, 1995). Social class is defined in terms of ownership and control of the means of production and control over the labor power of others. Specifically, Kohn's research findings suggest that social class affects fundamental dimensions of personality such as intellectual flexibility, self-directedness of orientation, and a sense of well-being or distress. As long as people's occupational position and educational experiences determine the extent to which they can exercise self-direction, these various dimensions of personality will be affected. As an extension to this theory, people's personalities are likely to change along with changes in the social position they occupy.

For example, a closely supervised and routinized assembly line job—a working-class job—barely offers any opportunity for workers to exercise self-direction. Consequently, their intellectual flexibility may dwindle and their self-directedness of orientation may diminish. In contrast, people located in advantageous social class positions with occupations that allow them to manage both the means and labor power of production, such as directors in a corporation, may have high degrees of control over their own work, which in turn will enhance the intellectual flexibility and self-directedness of orientation.

Similarly, a person's personality is also shaped by educational experiences to the extent that such experiences encourage self-direction (Kohn, 1995). As long as working-class society members have not experienced higher education, where intellectual flexibility and self-directedness are allowed and encouraged, they are unlikely to understand what these qualities look like in everyday lives. Whereas Kohn (2006) argued that parents raise children in ways that are expected to promote qualities that prepare children for lifestyles particular to their social class, some working-class parents might want their children to move up to middle class. These parents, however, might not know how to foster intellectual flexibility or self-directedness in their parenting. Consequently, what these parents encourage in their children, as most working-class parents do, is likely to be conformity and obedience. In contrast, middle-class parents take it for granted that their children are going to occupy positions that require a lot of independent decision-making in the future, and therefore, their children need to be prepared to know how to exercise self-directedness. More importantly, these middle-class parents understand how

to encourage expression of individuality, independent decision-making, and assertiveness in their children because they have experienced it in their upbringing and in their higher education.

Taken together, Kohn (1995, 2006) suggests that, at least in urban areas, middle-class individuals are more likely to have experience in and value self-directedness and intellectual flexibility. Therefore, middle-class parents, compared with their working-class counterparts, are more likely to encourage independent decision-making and problem-solving in their children. In other words, Kohn's theory would predict that middle-class parents tend to be authoritative, and working-class parents tend to be authoritarian. Authoritative parents demonstrate high levels of both responsiveness and demandingness; authoritarian parents demonstrate low levels of responsiveness and high levels of demandingness (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994).

Yet China, under the influence of Confucianism (an ideology based on an agrarian lifestyle) might manifest the opposite patterns. Confucianism was originally advocated by the literati, the educated class, yet prescribed for those who are less educated and engage in agrarian work (Lau, 1979). Research suggests that people with higher levels of education and occupation are well-versed in their Confucian beliefs, whereas working-class individuals and families tend to face the struggle between beliefs in Confucian principles and practical choices in family relations such as elderly care arrangement and parenting of adolescent children (e.g., Fong, 2004; Ikels, 2003; Slote & de Vos, 1998). Accordingly, parents with higher levels of education and occupation, or middle-class parents, might be more ready to establish parent-child relation based on principles of

philosophical filial piety. In other words, compared with working-class parents, middle-class parents might be more likely to demand a high level of respect for parental authority in all aspects of everyday life from their children, presuming that filial piety is still part of the overarching ideology for contemporary Chinese people.

### **Implications for the Proposed Study**

#### **Integrating the perspectives.**

*Bioecological and cultural-ecological theories.* Although Bronfenbrenner emphasized the crucial role of proximal processes in driving development, and for researchers, in understanding development, he and his coauthors never explicitly discussed how to measure proximal processes. As a response to this drawback, it is pointed out explicitly in the explication of cultural-ecological theory that it is the everyday activities which the developing person engages in that researchers need to focus on in studying proximal processes (Tudge, 2008). Moreover, researchers need to recognize that any information obtained is historically and contextually situated. Consequently, the reasonableness of what people believe in and what people do in their everyday lives depends on the cultural group to which they belong. Further, culture as the ultimate macrosystem is explicitly conceptualized in cultural-ecological theory, together with extensive discussion on how culture is linked with everyday lives. Cultural-ecological theory offers more detailed discussion, compared with bioecological theory, allowing researchers to make sense of the connection between the macrosystem and proximal processes.

***Kohn and contextualist perspectives.*** Kohn's research focuses on the linkages between the macrosystem (social class), the developing person (in adulthood), and sociohistorical time. More importantly, he explains such linkages in terms of proximal processes. That is, it is the day-to-day work conditions, which are largely influenced by the macrosystem and the sociohistorical time, that directly affect personality. In addition, when the focus is shifted to the developing child, developmental outcomes are directly explained by parenting, which is a proximal process, and indirectly by the microsystem (the home), the mesosystem (the home and the parental workplace), the macrosystem (social class and society), and sociohistorical time. Thus, Kohn's research fits well with Bronfenbrenner's bioecological theory. The only caveat is that the developmental process is unidirectional according to Kohn's sociological perspective (Kohn, Li, Wang, & Yue, 2007). That is, the individual is affected by social class and not vice versa. From a human development perspective, though, Bronfenbrenner emphasizes interrelations and mutual influences. As such, integrating bioecological theory with Kohn's research becomes helpful in preventing researchers from making deterministic statements because the bioecological theory highlights within-class variability as a result of influences from other factors besides social class such as person characteristics as well as proximal processes beyond the workplace. In addition, cultural-ecological theory, which is based on bioecological theory, provides further guidance for researchers to examine the role of the individual in initiating changes and sustaining stability in the proximal environment, which is the basis through which individual efforts affect the larger society. Therefore, cultural-ecological theory helps to explain how the link between social class, personality,



and parenting proposed by Kohn is maintained or broken.

### **Implications for studying parenting and adolescent development in China.**

Whereas Kohn's (2006) research does not directly provides clues to answer questions about likely mutual influences, bioecological and cultural-ecological theories suggest focusing on parent–child interactions rather than unidirectional influences from social class to parenting and then to child development. According to these theories, it is not sufficient to make predictions about parenting beliefs and practices and related child outcomes with information on social class alone. To understand the association between parenting and developmental outcomes, one needs to examine not only parenting itself, but also how children react to the parenting they have experienced. Further, such interplay between parents and children is best captured in their everyday activities.

Nevertheless, probing social class variability in people's attitudes and behaviors in handling authority issues is likely to be a productive way of understanding parent–adolescent relations in China because (a) research on filial piety in China during modern times has revealed that the social and practical aspects of Confucianism are largely deviant from philosophical accounts and that parent – adolescent relations cannot be described uniformly as authoritarian parents plus submissive children, and (b) Kohn's research and Confucian ideals are not completely congruent. Thus, it is possible that there are subgroups that fit with Kohn's perspective and subgroups that are characterized by Confucian ideals.

### **CHAPTER III**

#### **REVIEW OF LITERATURE**

The proposed study is designed to examine attitudes and practices involving authority in parents and adolescents residing in a metropolis in southern China. The following questions are addressed: (a) in terms of attitudes towards decision authority, what type of parental attitudes towards decision authority and what type of adolescent attitudes towards decision authority tend to go together, (b) in terms of behaviors in dealing with authority issues, what types of parenting practices and what types of reasons for adolescent conformity tend to go together, (c) to what extent are parenting practices and reasons for adolescent conformity or non-conformity associated with parent–adolescent agreement (or disagreement) on authority issues, (d) how are parental attitudes towards decision authority, adolescent attitudes towards decision authority, parenting practices, and reasons of adolescent conformity linked to adolescent school achievement and social competence. Variability as a function of social class is also studied. In this chapter, literature on both parental and adolescent attitudes and practices related to authority issues are reviewed, and the implications of extant research for addressing the research questions are discussed.

## **Attitudes towards Parental Authority: Parents versus Adolescents**

### **Conceptualization of parental authority.**

In classical Confucianism, parental authority involves the power to manage family assets and make decisions regarding children's living, educational, and marital affairs (Feng & Bodde, 1960). More importantly, parental authority in general is taken for granted (socially legitimate) with the assumption that the parents are capable and best situated to exercise such authority (Rosemont & Ames, 2009) which shall be acknowledged, in the socialization process by both parents and children. However, in historical accounts of everyday lives of Chinese people, parental authority is associated with authoritarianism because the children's will and capability are frequently ignored (Ho & Ho, 2008).

In research in human development and related disciplines, parental authority is conceptualized as the parents' potential ability to influence child attitudes and behavior (Peterson, Rollins, & Thomas, 1985). Parental authority includes expert authority, legitimate authority, reward authority, and coercive authority (Henry, Wilson, & Peterson, 1989). Expert authority is determined by parental knowledge or capabilities regarding important issues. Legitimate authority is granted by social and institutional norms. Reward authority is determined by parents' ability to manipulate family resources. Coercive authority refers to parents' ability to exercise punishment.

Parental authority in classical Confucianism involves all the nuanced forms of authority. That is, parents are considered to have the capability for their managing role (expert authority); parental authority is upheld by public opinions, official teachings, and

philosophical articulations (legitimate authority); finally, parents have the power to reward or punish children in the process of distributing family assets (reward authority). However, the social representation of Confucianism seems to emphasize the legitimate authority of the parents without acknowledging other forms of parental authority (Ho & Ho, 2008).

**Legitimacy of parental authority: The adolescent perspective.**

Research with American families on the legitimacy of parental authority suggests that adolescents attach more legitimacy to parental authority over some issues than others (Smetana & Daddis, 2002; Smetana, Metzger, Gettman, & Capione-Barr, 2006), and this pattern also applies to parents and adolescents in Hong Kong (Yau & Smetana, 1996). Specifically, adolescents tend to believe that parents should retain authority over moral and conventional issues, but not personal issues, hence the term “personal.” Moral issues involve “acts that are prescriptively wrong because they have consequences for the rights or welfare of others” (Smetana & Daddis, p. 564); conventional issues involves “arbitrary, agreed-on behavioral norms that structure social interactions” (Smetana & Daddis, p. 564); a prudential issue “pertains to the individual’s comfort, safety, or health” (Smetana et al., p. 202); and personal issues comprise “the private aspects of one’s life” (Smetana & Daddis, p. 564). There are also multifaceted issues that contain components of multiple types of issues and are blurry in terms of decision authority. Nevertheless, little research has been conducted linking adolescents’ judgment of the legitimacy of parental authority over everyday issues to their behaviors.

In a sample of Chinese adolescents aged from 13 to 18, Helwig, Arnold, Tan, and Boyd (2003) found that these adolescents are highly conscious of personal autonomy, individual rights, and democratic norms and do not yield to adult authority blindly. Adolescent participants were asked to evaluate several decision-making scenarios and provide justifications for their evaluations. The scenarios for evaluations involved three different contexts and two different events for each context (peer context: game, movie; family context: outing, tutoring; school context: field trip, curriculum). Adolescents favored the majority rule followed by consensus. Even though the focal child in the hypothetical scenarios was only 8 years old, adolescent evaluators believed the child should have equal rights as parents in making decisions.

In addition, there seems to be a developmental trajectory in adolescents' perceptions regarding the legitimacy of parental authority (Cumsille, Darling, Flaherty, & Martinez, 2009). In a large sample of Chilean adolescents, Cumsille et al. found that younger adolescents who demonstrated fewer problem behaviors and experienced more parental rules were more likely to believe that parents had legitimate authority over personal, prudential, and multi-faceted issues. In contrast, older adolescents who demonstrated more problem behaviors and who were subject to fewer parental rules were more likely to believe either that their parents did not have legitimate authority over any of the issues or that parents only had legitimate authority over prudential issues.

### **Legitimacy of parental authority: Parents versus adolescents.**

Research with American samples has indicated that parents and adolescents differ in their beliefs regarding the legitimacy of parental authority in various domains

(Smetana et al., 2006). Specifically, parents are more likely to view adolescents as obliged to disclose to parents and thus they believe they should have more authority to regulate adolescent behavior in all domains of everyday life. In contrast, adolescents feel more obliged to disclose prudential and moral issues but less so personal issues. In other words, compared with parents, adolescents seem to consider a wider range of issues to be personal, over which they themselves should have the decision authority. For example, some adolescents might consider what friends they make to be their personal business in which parental involvement is not needed or necessary. In contrast, parents might consider it legitimate to ask about and check on their children's friends. Taken together, the same issue might be perceived as personal by adolescents but prudential by parents.

According to Smetana and Daddis (2002), regulating personal issues is in accord with the extent of autonomy granting from parents, a key dimension differentiating authoritative versus authoritarian parenting (Steinberg et al., 1994). The potential discrepancy between parents and adolescents in their views of legitimacy of parental authority might lead adolescents to perceive parents to be engaged in less psychological autonomy granting than parents think of themselves (Smetana, 1995). It should be noted that less autonomy granting is not equivalent to engagement in psychological control or intrusion (Barber, Stolz, & Olsen, 2005). Psychological control refers to parental behavior that is intrusive to a child's psychological self (Barber & Harmon, 2002); involves parental manipulation in managing the parent-child relationship; and is manifested by parenting strategies such as guilt induction, love withdrawal, anxiety induction, and coercion. In other words, whether regulating children's behavior, even

regarding issues that children consider to be personal, becomes psychologically intrusive depends on the strategies that parents use. When parents use reasoning to stay involved in children's peer networks, which children might consider a personal issue, it does not constitute psychological control. In contrast, when parents use threats, coercion, or love withdrawal to force children choose certain friends or stay away from certain friends, such control behaviors are by definition psychological control.

How to negotiate and share authority regarding everyday issues is a cultural question, because the various beliefs and practices that people from different groups take for granted are by definition cultural (Tudge, 2008). Therefore, categorization of personal issues might be specific to cultural groups. Working class parents might consider it socially acceptable to have decision authority over certain issues which middle class parents might consider more appropriate for adolescents themselves to make decisions about. Similarly, there is likely within-group variability in attitudes towards decision authority among adolescents characterized by different intersections of social class, parenting, and personality. It is also expected that parents and adolescents will not completely agree on authority issues. Although the cultural contexts for the two generations have overlap, uniqueness, change, and extension can result in disagreement between the parent generation and the child generation.

With the recognition that parental authority is not an individual but rather a relational property, it is critical to study both parents' and adolescent children's perspectives, which is in accord with tenets of bioecological theory and cultural-ecological theory. Also, attitudes towards parental authority are likely to vary as a

function of the issue under consideration. Thus, in the proposed study, parents' and adolescents' attitudes towards decision authority will be examined with reference to specific issues. In spite of the recognition of parent–child disagreement in attitudes towards decision authority, such disagreement has yet to be linked to parenting and adolescent behaviors. Therefore, the proposed study is designed to examine to what extent parent–child discrepancy in their attitudes towards decision authority is predicted by parents' and adolescents' overall attitudes and behaviors in handling authority issues.

### **Adolescent Response to Parental Authority**

#### **Adolescent conformity versus non-conformity: Links with parenting practices.**

Whereas parental authority represents potential abilities of parents to influence child outcomes, parenting practices represent actual attempts of parents to influence child development (Peterson et al., 1985). As parenting practices are goal-oriented and context-specific parental behaviors (Darling & Steinberg, 1993), they capture what parents do to manage their children on a day-to-day basis. Because key tenets of bioecological theory and cultural-ecological theory suggest that everyday activities should be the focus of developmental research, parenting practices rather than parenting style will be examined in the proposed study. Parenting practices include how parents communicate their expectations and enforce rules regarding specific issues across different domains. For example, parents might use induction to talk their children out of a dating relationship. Parents might use rewards to ensure that their children get good grades. They may make special efforts to know their children's friends to make sure their children stay away from



delinquent peers. Parenting practices are the ways in which parents express their authority.

In response to parenting practices to exercise parental authority, adolescents might decide to conform or not conform, and there are likely to be a variety of reasons behind adolescents' decisions. Conformity refers to behaving according to the expectations or requirements of authority figures. Such behaviors may be voluntary or involuntary. Authority figures include anyone or anything for which a person has respect. For adolescents, authority figures might include law, media, religion, parents, teachers, and peers. Conformity to positive influences constitutes part of adolescents' social competence, whereas conformity to negative influences leads to negative academic outcomes, socially deviant behavior, and negative psychological outcomes (Peterson et al., 1985).

Most research in human development and related disciplines tends to focus on conforming behaviors operationalized as refraining from problem behaviors. Research suggests parental monitoring is a strong predictor of lower levels of externalizing behavior among adolescents (Barber et al., 2005; Fletcher, Steinberg, & Williams-Wheeler, 2004; Gray & Steinberg, 1999), at least in samples of American adolescents. However, the effect of parental monitoring is diminished in the presence of child disclosure (Stattin & Kerr, 2000). Although there is evidence that adolescents themselves play an important role in influencing parental monitoring behavior and hence its effects, few studies have probed why adolescents refrain from problem behaviors or behave in accord with parental expectations.

From a cultural perspective, conformity in the younger generation to the parent generation ensures continuity in culture, whereas non-conformity might stimulate or portend cultural change on either small or large scales (Tudge, 2008). In societies within which stability is emphasized, conformity in the younger generation is likely to be considered more important, compared to societies within which progress is emphasized. Regardless of societal expectations, some parents might not in their own parenting strictly repeat what they experienced in their upbringing, and some children might not conform to parental expectations and parental rules due to personal characteristics, situational reasons, or both. Taken together, studying both conformity and non-conformity in children's everyday lives is important for understanding culture as well as development.

**External compliance versus internalized conformity: Links with parenting practices.**

Adolescents demonstrate distinct types of conforming behaviors with respect to parental authority. External compliance refers to behaviors in response to watchful eyes or direct monitoring, whereas internalized conformity involves voluntarily identifying one's own behavioral standards with authority expectations (Peterson et al., 1985). In other words, it is possible for adolescents to demonstrate conformity (refrain from problem behaviors) either because they fear of parental punishment or because they recognize that engaging in problem behaviors is not "right." These two processes may be fostered in different ways. Also, these two forms of conformity are intimately linked because behavior that begins as external responsiveness to monitoring may gradually

become internalized commitment.

Peterson et al. (1985) collected information on internalized conformity through adolescent self-report to questionnaire items and information on external compliance through observation of parent–adolescent interactions while playing a board game involving career choice in a sample of American parent–adolescent dyads. Results indicated that parental support was positively associated with external compliance but not internalized conformity, parental induction was positively associated with both external compliance and internalized conformity, and parental coercion was positively associated with external compliance towards mother but negatively associated with internalized conformity.

In Confucianism, filial piety is considered to be the proper attitudes and actions in response to parental authority. Whereas classical Confucianism posits that filial piety is a result of self-cultivation and characterized by sincere deference (Rosemont & Ames, 2009), the social representation of Confucianism places more emphasis on external compliance than internalized conformity because filial piety in everyday lives is usually discussed from the perspective of parent figures (Ho & Ho, 2008). Research related to Confucianism and family relations in China, however, rarely examines how filial piety actually is fostered in children. Similarly, there is little research on Chinese families concerning how parents exercise their authority and how that links to various forms of conformity, indicated by reasons behind adolescents' conformity or non-conformity. Therefore, the proposed study is designed to examine parenting practices and reasons for adolescent conformity in dealing with a series of everyday authority issues in a sample of

Chinese parents and adolescents.

In accordance with research on attitudes towards decision authority (Smetana et al., 2006), which suggests that American adolescents tend to believe parents should make decisions related to prudential and conventional issues but not personal issues, adolescents might demonstrate external compliance (do what the parents ask) when dealing with prudential issues and internal conformity (do what one considers right or reasonable) when dealing with personal issues. There might also be other types of adolescent behaviors in response to parental authority. For example, children might just “happen to” conform to parental expectations. Children who have no interest in alcohol will naturally conform to parental expectations regarding abstinence from alcohol. The reason for such conformity could be simply adolescent personality. In the proposed study, various reasons for adolescent conformity or non-conformity are allowed to emerge from participant responses, although external compliance and internal conformity are expected to be among the major categories of reasons for conformity.

### **Social Class Variability in Parent–Adolescent Relationship Involving Authority**

Social class is a cultural factor which provides the resources, constraints, and materials for social interactions and individual development (Tudge, 2008); therefore, it influences and is reflected in the everyday lives of its members. In a study of young children from the US, Kenya, South Korea, and Brazil, Tudge found that middle-class parents were more likely than working-class parents to provide lessons for their children. Also, middle-class children were found to be more likely than working-class children to initiate such activities via behaviors such as asking questions. This finding can be

interpreted in the following ways: (a) there are more resources for lessons (e.g., books, computer, learning toys) in middle-class families, (b) middle-class parents are more likely to encourage their children to ask questions, (c) middle-class parents are more likely to view their children as being able to initiate learning activities and therefore respond to their children accordingly, and (d) middle-class children are more likely to find it an enjoyable experience to ask parents questions. In sum, compared with working-class families, children's initiation, which is a form of self-direction, is more likely to be something that is encouraged, valued, and taken for granted in middle-class families.

According to Kohn (1995), to the extent that middle-class parents experience self-direction in their occupations and education, they are likely to pass on the value of self-direction to their children, assuming that self-direction will be important for success for children's future based on their own life experiences. In contrast, working-class parents are more likely to emphasize conformity (internalized or not) in their parenting, which reflects their experiences at work and at school. That is, even though working-class parents also want their children to do well at school and move up the occupational ladder in the future, their limited experience with self-direction is likely to be transmitted to their children. Without sufficient recognition of the importance of self-direction or sufficient knowledge of how to foster self-direction, working-class parents might not be able to prepare their children for middle-class occupations. Thus, consciously or unconsciously, working-class parents have a good chance of raising children to become members of the working class.

Parents and adolescents from middle-class families are likely to have different views and practices concerning parental authority than do their working-class counterparts. For example, differences might occur in terms of what constitutes a personal issue and the legitimacy of parental authority in various domains. Differences might also occur in terms of the extent to which adolescents conform to parental rules and expectations, and more importantly, why they do so (or do not do so).

Nonetheless, the contrast between middle-class and working-class parent–adolescent relationships is not absolute, as parent–adolescent relationships are not solely influenced by social class. Not only is there variability among individual parents within a particular social class, but also adolescent children will be heterogeneous in their responses to parental authority (Tudge, 2008). Therefore, within-class differences might be just as noteworthy as between-class divergence.

### **Adolescent Outcomes: School Achievement and Social Competence**

#### **School achievement.**

School achievement has been attached with particular salience in Confucian teachings, and hence Chinese communities (Ho, 1986). Since the end of the Cultural Revolution, during which school learning was depreciated and virtually obliterated, China has refocused its attention on economic development and tried to position itself for competition in the global market. As a result, education once again is valued and the Confucian tradition of emphasizing school achievement once again is being promoted. Moreover, as noted by Wu (1996), strict family-planning policies have encouraged Chinese parents to push their children towards the highest possible academic

achievement. Therefore, focusing on school achievement as an outcome will yield findings most relevant to the concerns of both parents and children.

In the present study, school achievement refers to adolescents' overall performance (average end-of-grade exam scores) in three core curriculum subjects: Chinese, mathematics, and English. Previous studies have suggested that authoritative parenting consistently predicts higher levels of both academic and social competence for European American students, but less so for Asian American students (Chao, 2001; Chao & Aque, 2009). Among Chinese participants, parental monitoring predicted high school achievement in Chen, Lee, and Stevenson's (1996) study but not in Chen, Liu and Li's (2000) study.

To resolve the inconsistency in findings on parenting and adolescent school achievement, one needs to consider both parent and child characteristics as past research, in general, has focused nearly exclusively on how parenting affects child outcomes. Considering the characteristics of children is critical because Chinese adolescents tend to emphasize individual goals and agency in their learning (Li, 2006). That is, Chinese adolescents are likely to believe learning is their "own business." Moreover, autonomous learning motivation has been found to be associated with academic success for Chinese students (Vansteenkiste, Zhou, Lens, & Soenens, 2005). Accordingly, parenting can facilitate learning and help to produce better learning outcomes only when parental influences match children's needs and willingness. For example, adolescents might be more likely to accept parental opinions regarding their homework when they consider their parents to have the expert authority in this particular domain. Or, adolescents may

be less likely to benefit from parents' good intentions if parents resort to reward authority or coercive authority to enforce compliance with parental expectations. Adolescent school achievement is an outcome that is related to both parents' and adolescents' attitudes and behaviors.

### **Social competence.**

Like school achievement, social competence has been long been considered critical for success in a Confucian society. Success in social situations, in the Chinese case, refers to the ability to maintain group harmony and perform one's given social role (Hsu, 1981). Shyness-sensitivity used to predict popularity among Chinese school children, but becomes less relevant for social competence as China's rapid economic development continues (Chen, Cen, Li, & He, 2005). Therefore, characteristics such as willingness to take initiatives in interpersonal relationships might be important for success in social situations in the contemporary urban Chinese context. Chen et al. (2000) found that paternal warmth, but not maternal warmth, predicted adolescents' social competence two years later in a sample of Chinese families. The current study extends this line of research by considering parenting practices as they relate to specific issues instead of parental stylistic dimensions (e.g., warmth), children's responses to specific parenting practices, as well as parental and child attitudes as predictors of adolescent social competence. Therefore, the proposed study is intended to present a comprehensive portrait of parent-adolescent relationship dynamics in handling authority issues in their everyday lives.



According to cultural-ecological theory (Tudge, 2008), social competence is best measured as it relates to cultural expectations. The link between parents' and adolescents' attitudes and behaviors in handling authority issues and adolescent social competence in contemporary urban China, though, is complicated by the rapid transitions in social and economic systems over the past three decades. Theoretically, conformity is highly valued in subordinates (the younger generation) and therefore conforming individuals will be considered socially competent in a Confucian society, which China commonly is believed to be. Nevertheless, after several decades of rapid economic development and capitalization, many Chinese parents who reside in prosperous metropolitan areas might start to attach lower values to conformity and allow more autonomy in their children's lives. Similarly, adolescents might try to emphasize qualities such as assertiveness, and adolescents who demonstrate assertiveness might be more likely to be considered socially competent.

### **Summary and Research Questions**

In the study of parental authority, it is first important to consider both attitudes and practices in handling authority issues. In reference to attitudes, it is necessary to consider both parental and adolescent perspectives. In reference to adolescent children's responses to parental authority, it is necessary to examine why adolescents do or do not conform to parental authority. Second, research on the topic of parental authority needs to consider the impact of social class on parent–adolescent relationship dynamics. Third, adolescent school achievement and social competence as developmental outcomes need to be studied in the context of parent–child relationships, rather than as products of

parenting. Finally, recognizing that the everyday lives of parents and children are infused with and reflective of cultural influences, it will be illuminating to interpret the cultural ideologies and historical implications represented in attitudes and practices involving parental authority among research participants.

The proposed study is designed to examine within-society variability in Chinese parents' and adolescents' attitudes and practices related to authority. Focusing on authority issues in the parent–child relationship will shed light on the everyday representation of Confucianism because authority is a key concept in this philosophical system. The proposed study moves beyond convenient assumptions about the unequivocal subscription to Confucian principles in China by recognizing the differentiation and connection between philosophical Confucianism and social Confucianism. In accord with tenets of bioecological theory and cultural-ecological theory that (a) development is best understood through studying the everyday activities in which children are engaged, and (b) development is shaped by both parental and child influences, both parents and adolescents' attitudes and practices in handling everyday authority issues will be examined in this study. Within-society variability will be assessed by identifying subgroups of individuals who exhibit distinct patterns of attitudes and behaviors. Parent–adolescent relationships will be examined in terms of the match between parental attitudes and adolescent attitudes, as well as the match between parental behaviors and adolescent behaviors. Building on Smetana and colleagues' (Smetana, 1995; Smetana et al., 2006) work, the following questions will be addressed:

- (1) What are the subgroups of parents characterized by distinct patterns of attitudes towards decision authority as well as parenting practices across various issues?
- (2) What are the subgroups of adolescents characterized by distinct patterns of attitudes towards decision authority as well as reasons for conformity or non-conformity across various issues?
- (3) To what extent do parents' attitudes towards decision authority match those of their adolescent children?
- (4) To what extent do parenting practices match adolescent children's reasons for conformity or non-conformity?
- (5) To what extent is parent–adolescent disagreement regarding decision authority associated with parental attitudes towards decision authority, adolescent attitudes towards decision authority, parenting practices, and reasons for adolescent conformity or non-conformity?
- (6) How are adolescent school achievement and social competence linked with parental attitudes towards decision authority, adolescent attitudes towards decision authority, parenting practices, and reasons of adolescent conformity or non-conformity?

Additionally, variability as a function of social class will be examined for each of the research questions posed above. In all model testing, parent and child gender will be controlled.

Further, in the attempt to interpret everyday representations of cultural values and practices from parenting and parent–adolescent relationships, I do not plan to focus on any specific aspect of parenting as a presumptive representation of either classical Confucianism or social Confucianism. For example, Ho and Ho (2008) argued that challenging the authority would put the subordinate at great peril due to Confucian conservatism. For example, a son could be killed by his father, and students could be humiliated and beaten by their teacher, all under the justification of Confucian ideology of authority-subordinate hierarchy. Rosement and Ames (2009), however, suggested that such abusive and violent relationships were never supported by Confucius and his true followers. Abuse and violence certainly exist even in the name of Confucianism, but they will not be assumed to represent social Confucianism in the current study. Rather, what I try to do is explore the plausible patterns that characterize the data and the subgroups of participants described by such patterns, which may or may not be identical with tenets of classical Confucianism or consistent with existing documentations of social Confucianism.

## **CHAPTER IV**

### **METHODS**

#### **Research Design**

The proposed project employed a multi-informant, mixed-method, cross-sectional design to explore parents' and children's perspectives on family authority issues.

Qualitative interviews (completed by adolescents and parents) built upon extant methods for eliciting participants' attitudes towards parental authority (Smetana et al., 2006), adopted an established measure that have been previously validated in Chinese samples to assess adolescent social competence (Chen, Li, Li, Li, & Liu, 2000), and utilized structured questions about behaviors in handling authority issues that were tailored to the local community context based on data obtained through preliminary interviews. Adolescent academic achievement data were obtained from the schools (although adolescents were also asked to report on their general ranking). The adolescent and parent assessment batteries began with demographic measures to gather information on age, gender, and family structure.

A mixed-methods research design was adopted to allow qualitative and quantitative approaches to inform each other so that findings and inferences with more breadth and depth than using either approach alone could be produced (Miller, 1997). In the current study, a sequential procedures approach was adopted which involved expanding the findings of one method with another method as described by

Creswell (2003). Within the sequential design, Morgan (1998) delineated four models which are characterized by a priority decision and a sequence decision. The four models are (a) preliminary qualitative methods in a quantitative study, (b) preliminary quantitative methods in a qualitative study, (c) follow-up qualitative methods in a quantitative study, and (d) follow-up quantitative methods in a qualitative study. The first model was utilized in the present study. That is, a series of semi-structured individual interviews was conducted to refine and build the questionnaire for a larger-scale survey.

This research design, from a methodological perspective, falls under the postpositivist paradigm (Guba & Lincoln, 1994), which in essence is not compatible with the contextualist theoretical framework of this study. In regard to ontology, contextualism, which falls under the constructivist paradigm, posits that reality only exists in mental constructions, which are influenced by the historical and social contexts of individual persons or groups. The current study is built upon such assumptions about the dynamic nature of human relationships and human development in historical and cultural contexts. In regard to epistemology, it is recognized that knowledge is created in the dialectical interaction between the inquirer and the participants. In regard to methodology, however, the study is restricted to limited inquirer–participant co-construction due to consideration of practicability and resources. Moreover, the quantification processes and all of the following quantitative analyses are not intended to verify or falsify hypotheses. Rather, the quantitative analyses are exploratory in nature and are aimed at summarizing emergent, holistic properties of parent–child relationships. Such patterns are not understood as representations an objective existence. Instead, they are to be interpreted

for their heuristic values for the understanding of a fluid cultural phenomenon.

## **Participants**

The sample included 694 middle-school students and their parents from two districts in Guangzhou, Guangdong, China. Recruiting participants and completing the informed consent protocols took about three weeks. Afterwards, it took four weeks to conduct and transcribe the interviews, followed by an additional two weeks coding the interview responses to finalize the questionnaire and another week to organize the survey. In sum, on-site data collection lasted 10 weeks from mid-March to mid-May 2011. In compensation for the school staff's efforts in helping with participant recruitment and other logistical support, the participating schools were offered English learning materials and a certificate of appreciation.

Middle-school students were the focus of this study because adolescents of this age group are starting to distance themselves from parents in decision-making, whereas their parents are adjusting to parenting adolescents rather than elementary-school children. During such a transition period, authority issues – hence conflict and negotiation involving authority issues between parents and children – are likely to become salient. Thus, adolescents of this age group are particularly suitable for providing insight into the research questions posed.

Among the parent participants, 58% were male (primarily fathers, 1 brother, and 2 grandfathers) and 42% were female (including mothers and 1 grandmother). Ninety-five percent of the parents were married, 3% divorced, 1% remarried, and 1% widowed. The median and mean age of parents were both 42 years ( $SD = 4.8$ ). According to

parental report, annual household incomes ranged from \$0 to \$83,000 with a mean of \$7,130 and a standard deviation of \$7396. Most parents had less than a high school education ( $M = 10$  years,  $SD = 2.4$  years). I intended to recruit children from ordinary families who sent their schools to the regular public schools within their residential zones, compared with families who had the resources and power to select schools for their children. It turned out that the majority of these families were working class based on parental education and occupation.

The majority (85%) of the students were 13 or 14 years old, 7% of the students were 12, and 8% of the students were 15 or older. Forty-five percent of the participants were boys and 55% were girls. Fifty-seven percent of the students reported that they had siblings. Eighty-eight percent of the students reported that they lived with both parents, whereas others lived in single-parent households or with relatives other than parents. Seventy-three percent of the students thought their family income level was about average, 15% thought they were above average, and 12% thought that they were below average or having difficulty getting by. In reference to academic standing, 22% of the students reported that they usually ranked within top 10 in their classroom, 22% reported that they ranked between 11 and 19, 25% reported that they ranked between 20 and 29, 19% reported that they ranked between 30 and 39, and 12% reported that they ranked 40 or lower. On average, there were between 40 and 45 students in each classroom.



## **Procedures**

### **Preliminary interviews.**

A total of 16 middle-school students and their parents were recruited for interviewing. The purpose of multiple interviews was to gain perspectives from both parents and children and to obtain viewpoints as diverse as possible. Selection of interviewees were based on a  $2$  (sex)  $\times$   $2$  (middle class vs. working class)  $\times$   $2$  (overall school performance of adolescent: high achieving vs. low achieving) design. Each category (eight in total) was represented by two adolescents and their parents.

The interviews were conducted at home by choice of participants. Parents and adolescents were interviewed individually in separate rooms, except for a couple of families who chose to be interviewed together. Each interview took about 60 minutes and was audio-recorded for later transcription and coding. The discussions were based upon the semi-structured interview protocol described in the Measures section. Specifically, participants were asked to discuss the following topics: (a) general parent–child relationships, (b) rules and expectations for children, (c) how rules were enforced and how expectations are communicated (parenting practices), (d) to what extent children obeyed parental rules and expectations (adolescent conforming behaviors), and (e) why children “listened to” parents or not (reasons for adolescent conformity). Also, participants were encouraged to describe real-life examples or to comment on vignettes that involved negotiations in handling authority issues. Information and examples derived from the qualitative interviews were used to create additional topics and questions for the survey, and most importantly, to create item response categories for parenting practices

and reasons for adolescent conformity.

### **Survey administration.**

A total of 694 adolescents and their parents from two middle schools participated in the survey, with a response rate of 62%. The survey included questions dealing with the topic of parental authority with response choices derived from the qualitative interviews, together with common measures established in the literature on parenting, parent–child relationships, and adolescent psychosocial outcomes. Adolescent participants completed the questionnaires in about 45 minutes (one class period) at a location within their schools designated by the school administrative staff. Parents of the adolescent participants were invited to complete the portion of the questionnaire on parent–child relationship in handling authority issues, as well as a short form on demographic information. The parent version of the survey took about 15 minutes and parents completed the survey during the mid-term Parent-Teacher-Association (PTA) conference. As data collection took place right after the mid-term exams, records of students' test results for the mid-term exam were, with parental consent and adolescent assent, collected from the school administrative office to use as an indicator of academic achievement.

### **Measures**

#### **Qualitative interview protocol.**

The purpose of the interview was to capture parents' as well as adolescents' perceptions and viewpoints of family authority issues. The interview was roughly laid out based on the following guiding topics and questions adapted from Smetana et al.'s (2006)

stimulus items and Helwig et al.'s (2003) vignettes.

- (1) How are you getting along with your child (parents)?
  - (a) Do you think your child (parents) feel the same way as you do?
- (2) What rules/expectations do you have for your child? (What rules/expectations do your parents have for you?). [For example, these might include some of the following kinds of items which tap the noted authority domains.]
  - (a) Going out with friends: prudential and personal domains
  - (b) Dating: conventional, prudential, and personal domains
  - (c) Visiting the internet: prudential and personal domains
  - (d) Talking back: conventional domain
  - (e) Lying to parents: moral domain
- (3) For parents: How do you enforce your rules? How are your expectations communicated? (For children: How are the rules enforced? How do you learn about your parents' expectations? Can you describe an instance?)
- (4) Does your child listen to you [for each instance of the rules/expectations]? (Do you listen to your parents [for each instance of the rules/expectations]?)
- (5) For the instances that your child listens to you, why do you think he/she listens to you? In the instances that your child does not listen to you, why do you think he/she does not? (In the instances that you listen to your parents, why do you listen to them? In the instances that you do not listen to your parents, why

don't you?)

(6) Examples of additional vignettes that the parents and children were asked to respond to included the following.

(a) In a family, the parents of an eighth grade child want to enroll him or her in a Saturday tutoring program. The tutoring will take all day, as it will cover a variety of subjects. The child does not want the additional tutoring. What do you think the child should do? Why?

(b) In a family, the child wants to dye his/her hair when he/she starts senior high school (tenth grade). What should the parent do? Why? What should the child do? Why?

#### **Primary survey instruments.**

**Decision authority.** To capture parents' and adolescents' attitudes towards decision authority issues in the parent–child relationship, participants were asked whether decision-making regarding authority issues shall fall on (a) parent alone, (b) parent primarily, (c) parent and child together, (d) child primarily, or (e) child alone. The responses were coded on a scale from -2 to 2. A score below 0 indicated that decision authority lay in the parent side, whereas a score above 0 indicated that decision authority lay in the adolescent side. A score of 0 indicated mutual decision-making in the negotiation of authority issues. The list of issues was adapted from items used in Smetana and colleagues' research (Smetana et al., 2006; Yau & Smetana, 1996) as well as information gathered from the preliminary interviews. The original measure has been

translated into Chinese and used with a sample of Hong Kong adolescents (Yau & Smetana, 1996). Exploratory factor analysis suggested that the issues fell into three categories: prudential, personal, and multifaceted (see Table 1). To reduce model complexity and to protect power, the following seven issues which also appeared on both the scales of parenting practices and reasons for adolescent conformity were selected for subsequent data. The final measure consisted of the following issues: dating (multifaceted), visiting an internet café (prudential), homework (personal), coming home on time when going out (multifaceted), chores (personal), drugs (prudential), and friends that one makes (multifaceted). Parent reports were used to indicate parental attitudes towards decision authority, and adolescent reports were used to indicate adolescent attitudes towards decision authority.

*Table 1*

*List of Issues on the Decision Authority Scale*

	Multifaceted	Prudential	Personal
Drugs		*	
How friends are treated	*		
Internet café		*	
How seniors are treated			*
Lying		*	
How teachers are treated			*
Cursing		*	
Websites visited on internet	*		
Going out	*		
Dating	*		
How I spend my money	*		
Text message contents	*		
What I wear	*		

	Multifaceted	Prudential	Personal
School grades			*
Homework			*
Chores			*
Peers (the friends I make)	*		

***Discrepancies in attitudes.*** Indicators of parent–adolescent discrepancies in attitudes towards decision authority were created by first subtracting the parent score from the child score for each of the seven issues and then taking the absolute values. Scores ranged from 0 to 4, with a score of 4 either suggesting a parent–adolescent dyad in which the adolescent was for “child alone” in terms of decision authority for a particular issue and the parent was for “parent alone,” or suggesting the exact opposite. Finally, a score of 0 indicated complete agreement within a parent–adolescent dyad on a particular issue.

***Parenting practices.*** Items were designed to capture parents’ actual attempts to exercise parental authority in the selected issues. For each issue, parents resorted to different ways of communicating and enforcing expectations. Accordingly, adolescents were asked to indicate which response options best fit their parents’ behaviors (see Appendix A). Response choices were based upon information from preliminary qualitative interviews and varied slightly across issues. For example, response choices for parenting practices related to the issue of dating included (a) never really talked about it, (b) peaceful reasoning and explaining, (c) loudly demanding, (d) nagging, (e) reward for following rules, (f) punishment for breaking rules, (g) stalking or escorting, and (h) do not really have such a requirement. For the issue of going out, however, the response

option concerning stalking or escorting was replaced with one concerning constantly calling.

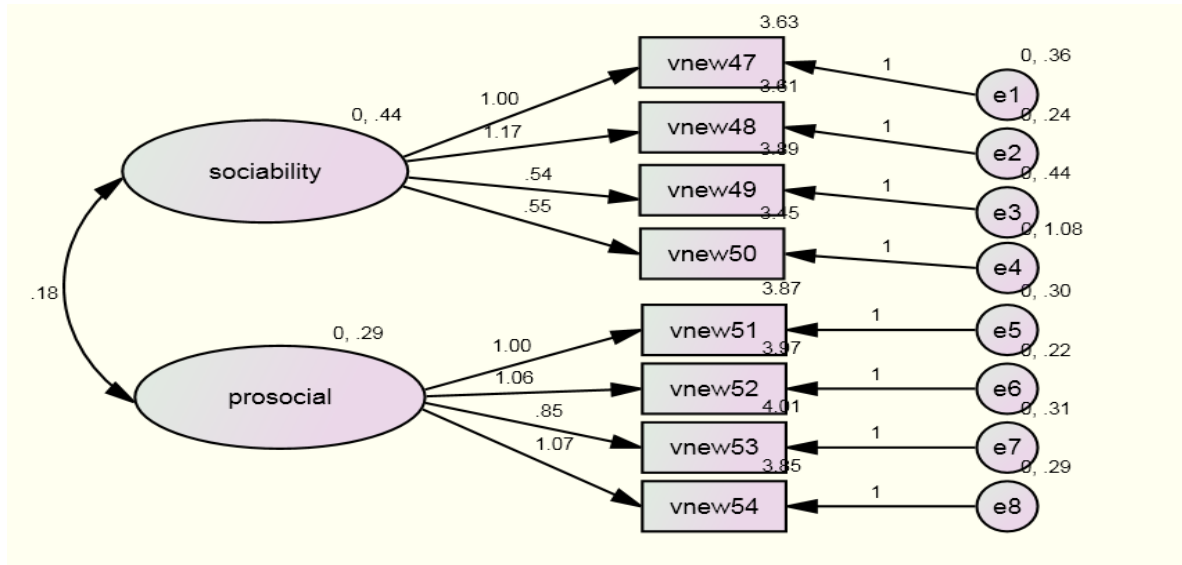
***Reasons for adolescent conformity.*** For each of the rules and expectations, adolescents were first asked whether they met parental expectations or followed parental rules (see Appendix A). The response options were (a) yes, (b) sometimes, (c) basically no. Use of “basically no” instead of “no” (literal translation) was based on information collected during preliminary interviews, in which both parents and adolescents expressed discomfort with using absolute terms. Next, for whatever option participants selected, they were asked to explain why with a list of response choices derived from the preliminary interviews. Taking the rule of no dating as an example, the list of response categories included (a) because I should do what my parents want me to do, (b) this is my personal thing, none of their business, (c) I agree with my parents, I think they are reasonable, (d) I do not agree with my parents, I don’t think they are reasonable, (e) I am not interested in it, it has nothing to do with my parents, and (f) I cannot control myself. Wording varied slightly across issues. Preliminary analyses suggested that the responses to the question regarding whether adolescents conformed and the responses to questions regarding reasons for conformity did not always correspond to one another. For example, some participants suggested that they listened to their parents, but nonetheless selected “I cannot control myself” as a reason for nonconformity. Therefore, reasons for conformity, rather than self-reported conforming or non-conforming behaviors, remained central to addressing the research questions. Further, focusing on reasons for conformity was consistent with the goal of moving beyond a simplistic indicator of obedience versus

disobedience towards exploring value implications of behaviors.

***Academic achievement.*** Academic achievement was indicated by adolescents' average scores on mid-term exams across three core subjects, Chinese, Math, and English. It was obtained from school records.

***Social competence.*** The social competence of adolescents was assessed with the eight-item self-rated social competence scale used in a study conducted by Chen et al. (2000). As part of their study, they translated the scale into Mandarin Chinese and psychometrically validated the scale with 12- to 14-year-old Chinese adolescent participants. They found that the scale could be adequately characterized by two overlapping but distinct factors, one representing prosocial orientation and the second representing sociability. Adolescent participants were asked to report on how well they considered the items to describe them on a 4-point scale (1 = strongly disagree and 4 = strongly agree). Confirmatory factor analysis using the current data suggested that the two-factor structure was replicated (see Figure 1). Summary scores were created for each subscale by summing up the items. A higher score indicated a higher level of prosocial orientation or sociability.





**Social class.** Based on Kohn's (1995, 2006) research, social class is defined by ownership and control of the means of production. It is characterized by experience of self-directedness in one's education and occupation. In Kohn's research, however, occupation was typically taken as the major indicator of social class, and the education factor was neglected. Therefore, in the current project, both education and occupation are considered to determine a family's social class so as to be consistent with Kohn's theoretical conceptualization as well as improve upon Kohn's operationalization of social class from previous studies. The families are categorized into middle class, working class, and two additional mixed social classes according to the coding scheme listed in Appendix B. Middle-class occupations are those that afford self-direction and autonomous decision making, such as director, accountant, and police officer. Middle-class education refers to experiences in the higher education environment (i.e., college).

Working-class occupation are those that afford little self-direction and involve mostly mechanical repetition, such as assembly line workers, janitor, and driver. Working-class education refers to no more than 12 years of school education. In this project, middle-class families were families within which both parents had a middle-class occupation and a middle-class education. For example, if both parents had associate degrees and held executive positions, that family was classified as middle class. Working-class families referred to families in which both parents had working-class occupations and a working-class education. For example, if both parents had few than 9 years of education and worked as farm laborers, the family was classified as working class. Two categories of mixed-class families were defined. The first category of mixed-class families (Mixed-1) referred to families where one of the parents was middle class and the other was working class. The second category (Mixed-2) referred to families where the occupation and education for one or both parents did not match. For example, if one of the parents had a high school education but worked as a company manager, that family was classified as Mixed-2. This category took into account a unique characteristic of this cohort of Chinese people, most of whom were born in the 1960s. It was uncommon for anyone to have more than 12 years of education in China 30 years ago. As a result, teachers, accountants, pharmacists, and similar professional occupations required only education at a vocational school which offered vocational training during the high school years. Also, thanks to rapid economic development in the past 20 to 30 years, many Chinese people without higher education experiences started their own businesses or occupy managerial positions in private businesses. As another example, if both parents had an associate degree but one

was a driver and the other was a factory worker, that family was classified as Mixed-2.

Among the 586 families that provided valid parental occupation and education data, 18 families (3%) were classified as middle class, 427 families (73%) were classified as working class, 30 families (5%) were classified as Mixed-1, and 111 (19%) families were classified as Mixed-2. Ninety-two families were not classified due to incomplete information. Among the Mixed-2 families, 14 had at least one parent who had a middle-class education but a working-class occupation. Parents in the rest of the Mixed-2 families had working-class educations but middle-class occupations. This classification could also reflect the large population of migrant workers trying to seek employment in the city. Some migrant workers could have an associate degree or higher but have had difficulty securing middle-class positions. This occupation–education mismatch could also be due to the high unemployment rate in this city and throughout China in recent years (Tan, 2009).

## **Analytic Steps**

### **Coding of interviews.**

Analysis of the interview data was conducted immediately after each interview, and continued until information (e.g., topics, items, and response choices) used for the questionnaire was finalized. Following the steps outlined by Maxwell (2005), I first listened to the audio recordings of each interview multiple times, developed tentative ideas about categories and relationships, and wrote reflective memos. Next, I had the interviews transcribed, and upon reading the transcripts, identified themes and developed coding categories. Finally, items and corresponding response choices for the assessment

of parent–adolescent relationship in handling authority issues were crafted and incorporated in the survey questionnaires (see Methods section).

### **Analytical Approach.**

To take into account the intertwining nature of attitudes and behaviors, as well as the interdependence in parent–adolescent relations, a person-centered analytical approach was adopted in this study. As such, the aim of data analyses was to portray a snapshot of a complex sociocultural phenomenon by focusing on the interrelationships of its elements, recognizing that the meaning of a particular data element lies in its relationships with other elements. Specifically, the primary quantitative analytical methods included latent class analysis (LCA; Collins & Lanza, 2010) and configural frequency analysis (CFA; von Eye, 2002; von Eye, Mair, & Mun, 2010), which were used to characterize how subgroups of individuals and families were similar to each other in a holistic manner (Bergman & Magnusson, 1997).

LCA and CFA are person-centered analytical methods congruent with the holistic-interactionist approach to understanding development (Magnusson & Stattin, 2006). As articulated by Magnusson and colleagues, person-centered approaches treat the individual as a whole being in terms of functioning, process, and development (FPD). Furthermore, they posit that lawfulness and structure in intra-individual growth and inter-individual differences in FPD can be characterized in terms of a relatively limited number of distinct patterns. More importantly, in the empirical world, the numbers of patterns are sufficiently small that person-centered analytic methods can be used to indentify typologies of patterns and to characterize individuals according to them. As such, LCA

and CFA are especially well suited for identifying homogeneous subgroups described by distinct patterns reflecting within-culture variability in parents' and children's perspectives on parent authority parenting practices and adolescent conformity.

Follow-up analyses were used to link typologies revealed by LCA and CFA with parent–child disagreement, academic achievement and social competence outcomes, as well as to explore the potential moderator effects of social class. Specifically, general linear models also were used to assess the magnitudes of parent–child discrepancies in attitudes towards decision authority as functions of the typologies and other background characteristics (Research Question 5). Similar analyses were conducted to examine to what extent the academic achievement and social competence of adolescent children were predicted by the typologies and background variables (Research Question 6).

#### **Preliminary quantitative analyses: Missing data.**

Descriptive statistics for each variable were checked to identify outliers and data entry errors, and errors were corrected before any analyses were run. Patterns of missing data across variables within individual scales revealed that participants tended to have missing data across all variables within a scale instead of intermittent missing data within a scale. Further, among the participants who had incomplete data for the questions concerning parent–adolescent relations in handling authority issues, most of them seemed to stop responding at a certain point, after completing all previous items. These patterns suggested that they might have been tired of filling out the questionnaires rather than skipping items due to item content. Due to administrative error, one of the schools failed to provide test score records for all 7<sup>th</sup> grade students. Consequently, information on

academic achievement was available for only 75% of the sample.

**Research question 1 and 2: Identifying subgroups of parents and adolescents.**

Separate latent class models were used to identify typologies of parental attitudes toward decision authority and to classify individual parents within this typology. The common items on dating, visiting internet café, homework, coming home on time when go out, chores, drugs, friends that one makes were used in these analyses. A second typology of parenting practices in enforcing rules about these seven issues was also developed. Similarly, separate latent class models were used to identify typologies of adolescents' (a) attitudes towards decision authority, and (b) reasons for conformity or not.

***Purpose for LCA.*** Latent class analysis is a type of factor analytic model that summarizes response patterns on nominal or ordinal variables in terms of a smaller number of categorical latent variables (latent classes). In factor analysis, factor scores describe individuals on a continuum, whereas in LCA, individuals are described in terms of a set of mutually exclusive and exhaustive latent classes, which are derived from response patterns across the set of observed variables (Lanza, Collins, Lemmon, & Schafer, 2007). In factor analysis, factor loadings indicate the relationship between the latent factors and continuous manifest variables. In LCA, the conditional probability of responses to each category of each manifest variable,  $p$ , indicates the relationship between the latent classes and the categorical manifest variables. LCA is also similar to cluster analysis in terms of summarizing response patterns by identifying subgroups of individuals with homogenous response patterns. Within LCA, the prevalence of each latent class is designated by a parameter,  $\gamma$ . Furthermore, LCA also yields the posterior

probability that each sample individual falls into each latent class, which enables researchers to link class membership of participants to predictors or outcomes (Collins & Lanza, 2010; Goodman, 2007).

***Procedures for LCA.*** LCA models were analyzed using SAS 9.2 Proc LCA (Version 1.2.7; Lanza, Dziak, Huang, Xu, & Collins, 2011), following the procedures recommended by Collins and Lanza (2010). First, frequency distributions were examined for all variables and cross-tabulation tables were created give initial impressions of response patterns. Second, 1-class to 6-class LCA models were specified and estimated. Third, the best-fitting model was chosen by comparing the fit indices (likelihood tests and information criteria) and considering the theoretical meanings of the latent classes (Nylund, Asparouhov, & Muthén, 2007). Finally, labels were assigned to the latent classes based on the patterns of the conditional responses (ps) across the issues.

***Classifying individuals.*** For each latent class model, the posterior probabilities of latent class memberships across the sample were examined to determine whether it was appropriate to treat latent class memberships as definitive in subsequent analyses. For parent typologies describing patterns of parenting practices, only 20% of the participants had a maximum posterior probability of below .80. For example, the posterior probabilities for one parent were .01 for the first latent class, .03 for the second latent class, .01 for the third latent class, and .95 for the fourth latent class. Based on the maximum posterior probability (although it was below .80), this parent was classified into the fourth latent class. For parent typologies describing patterns of attitudes towards decision authority, only 22% had a maximum posterior probability of below .80. For

adolescent typologies describing patterns of reasons for conformity, 11% had a maximum posterior probability of below .80. Finally, for adolescent typologies describing patterns of attitudes towards decision authority, 20% had a maximum posterior probability of below .80. Overall, the majority of participants were clearly and unambiguously assigned to single latent classes identified by the LCA models (see Table 2). When assigned latent classes are this clear, latent class memberships can be treated as definitive rather than probabilistic.

*Table 2*

*Descriptive Statistics of the Maximum Posterior Probabilities for Each Latent Class Model*

	Mean	Std Dev	Min	Max
Parenting practices	.90	.15	.35	1.00
Reasons for adolescent conformity	.94	.12	.44	1.00
Parental attitudes	.87	.16	.37	1.00
Adolescent attitudes	.89	.14	.44	1.00

Based on these classifications, separate typologies of parents and adolescents were created. Each parent was described by a typology concerning attitudes and a typology concerning parenting practices. Each adolescent was described by a typology concerning attitudes and a typology concerning reasons for conformity. The parent typologies and adolescent typologies represented subgroups in the sample, capturing within-society variability.



**Research questions 3 and 4: Examining combinations of parent–adolescent typologies.**

**Purpose for CFA.** Given the parent typologies and adolescent typologies, configural frequency analysis (CFA: von Eye, 2002) was used to assess the extent to which parents and adolescents match in terms of their attitudes towards decision authority, and also in terms of their behavioral patterns (parenting practices vs. reasons for adolescent conformity). The basic purpose of CFA is to identify configurations of categories that are observed more (or less) frequently than expected based on a pre-specified log-linear model. Thus, CFA can be used to identify particularly salient combinations of parent and adolescent subgroups in terms of configurations between their LCA-derived categories. Configurations, which are used to describe groups of individuals, are formed by cross-classification of one or more categorical variables. For example, if one variable has four categories and the other also has four categories, there will be  $4 \times 4 = 16$  possible configurations. If the number of participants characterized by Configuration (1, 1) is significantly larger than what would be expected under the base model, Configuration (1, 1) will be called a *type*. In contrast, if the number of participants for a particular configuration is smaller than predicted by the base model, it will be called an *antitype*. In short, the focus of CFA is on patterns of categories that are over- or under-represented within the sample, rather than the variables per se. It is well-suited for determining whether particular patterns between parent and adolescent typologies are especially salient (as indexed by their over/under representation within the data). Therefore, it is congruent with the theoretical framework of this project, which

emphasizes the study of processes and interrelationships.

***Procedures for CFA.*** A typical CFA estimation involves five steps: (a) selection of a CFA base model, (b) selection of a concept of deviation from independence, (c) selection of a test of significance for the deviation, (d) performance of the significance test and identification of types and antitypes, and (e) interpretation of types or antitypes.

***Social class.*** CFA was also used to examine the degree to which particular social class categories were associated with particular categories of parenting practices, reasons for adolescent conformity, parental attitudes towards decision authority, and adolescent attitudes towards decision authority. For example, if Kohn's theory applied to this sample, working-class families would have an overrepresentation in a parenting practice category emphasizing obedience, which would be indicated by a type. Kohn's theory would also predict that working-class families would be unlikely to be represented by a parenting practice category characterized by emphasis of democratic reasoning, which would be indicated by an antitype.

#### **Research question 5 and 6: Linking typologies to outcomes.**

General linear modeling (GLM) was used to assess the extent to which adolescent academic achievement and social competence varied across the typologies of parenting practices, reasons for adolescent conformity, parental attitudes towards decision authority, and adolescent attitudes towards decision authority. Interaction terms were created to assess the influences of parent–adolescent combinations in terms of attitudes indicators and behavioral indicators, respectively. Social class was entered as a covariate. Sex of the responding parent and sex of the adolescent child were entered as control variables.

Assumptions of normality and homogeneity of variance were examined by plotting residual values against predicted values, as well as the predictors. GLM models were finalized by deleting nonsignificant effects based on Type III sum of squares. Significant effects were probed with least square means derived from the final models.

## **CHAPTER V**

### **RESULTS**

The results section is laid out in four sections. First, descriptive statistics for the study variables are provided, including frequency distributions for parenting practices, reasons for adolescent conformity, parental attitudes towards decision authority, and adolescent attitudes towards decision authority for individual issues, as well as univariate characteristics of adolescent academic achievement, sociability, and prosocial orientation. Second, latent class analysis (LCA) parameters for parenting practices, reasons for adolescent conformity, parental attitudes towards decision authority, and adolescent attitudes towards decision authority are presented. The most appropriate model was selected based on fit indices and interpretability, and labels were assigned to summarize the typologies and describe the patterns revealed by LCA. Further, the validity of using the LCA-derived typologies within subsequent analyses is evaluated. Third, configural frequency analysis (CFA) parameters are presented for models linking typologies of parenting practices with typologies of reasons for adolescent conformity, as well as for models linking typologies of parental attitudes towards decision authority with typologies of adolescent attitudes towards decision authority. These are followed by CFA analyses linking social class to each of the parent and adolescent LCA-derived typologies. Finally, general linear modeling was conducted to assess the linkage between the LCA-derived typologies and adolescent outcomes indicators.

## **Descriptive Statistics**

Frequency distributions are presented in Tables 3 to 6 for responses to questions concerning parenting practices, reasons for adolescent conformity, parental attitudes towards decision authority, and adolescent attitudes towards decision authority for individual issues. In terms of parenting practices, most adolescents reported that their parents tended to use peaceful reasoning consistently across all issues. According to raw frequencies, very few adolescents reported that their parents used punishment, active monitoring (e.g., stalking or constantly calling), or loudly demanding strategies. More importantly, the LCA-estimated response probabilities for these strategies were essentially zero for all latent classes, which meant that these categories were negligible and not meaningful in model estimation. Therefore, these three categories were dropped in final LCA models of parental practices. Similarly, in reasons for adolescent conformity, few adolescents reported that they considered their parents unreasonable, and more importantly, the LCA-estimated response probabilities for this particular reason were consistently zero across all latent classes. Consequently, this category was dropped from the final LCA models of adolescent reasons for conformity. As for attitudinal indicators, there was an almost even split between supporting parent-oriented decision making, child-oriented decision-making, and mutual decision-making.

*Table 3*

*Frequency Distribution of Parenting Practices for Each of the Issues*

	drug	café	going out	dating	homework	chores	peer
never talked about it	150	174	124	132	47	126	105
peaceful reasoning	311	290	260	363	319	262	351
loudly demanding	25	22	23	16	34	28	17
nagging	59	56	82	64	159	96	78
reward	19	22	22	25	66	68	22
punishment	12	20	11	13	19	14	11
active monitoring	4	3	48	9	42	22	3
no such a rule	22	42	64	43	12	105	26

*Note.* N = 694. Numbers represent the count of adolescent participants who reported that their parents used a particular practice to communicate a particular rule.

*Table 4*

*Frequency Distribution of Reasons for Adolescent Conformity for Each of the Issues*

	drug	café	going out	dating	homework	chores	peer
do what parents told	224	235	218	194	206	226	205
personal business	21	29	57	45	57	36	45
agree with parents	265	256	231	307	271	217	273
disagree with parents	10	10	23	15	25	12	12
personality	163	148	68	111	85	106	77
cannot control	4	7	42	13	41	60	55

*Note.* N = 694. Numbers represent the count of adolescent participants who reported that they conform to parental expectations or not in a particular issue for a particular reason

*Table 5*

*Frequency Distribution for Parental Attitudes towards Decision Authority for Each of the Issues*

	drug	café	going out	dating	homework	chores	peer
parent-oriented	426	430	148	250	101	133	105
mutual	181	169	350	293	162	186	317
child-oriented	35	43	142	95	365	308	205

*Table 6*

*Frequency Distribution for Adolescent Attitudes towards Decision Authority for Each of the Issues*

	drug	café	going out	dating	homework	chores	peer
parent-oriented	438	444	132	273	117	145	97
mutual	137	128	289	214	85	104	225
child-oriented	82	85	236	169	456	408	335

*Note.* N = 694. Numbers represent the count of adolescent participants who selected a particular category of decision authority for a particular issue.

Means, standard deviations, and ranges were provided for the adolescent outcome indicators, namely, academic achievement (GPA), sociability, prosocial orientation, and parent–child discrepancy regarding attitudes towards decision authority (see Table 7). A series of t-tests and ANOVAs were conducted to examine whether the outcome indicators varied as a function of the schools that adolescents attended or their families’ social class backgrounds. Results suggested that students from one school had higher GPAs, and had more disagreement with their parents on the issue of drugs. Apart from that, the outcome indicators were not related to either school or social class.

*Table 7*

*Descriptive Statistics for Outcome Variables*

Variable	Mean	Std Dev	Min	Max	School comparison (t value)	Class comparison (F value)
GPA	66.69	18.56	14.63	96.13	6.17*	.31
sociability	14.57	2.62	4	20	1.73	.50
prosocial	15.72	2.41	4	20	.98	.23
discrepancy-drugs	0.94	1.08	0	4	1.5*	2.20
discrepancy-café	0.90	0.91	0	4	.41	.41
discrepancy-going out	0.91	1.00	0	4	.65	.34

discrepancy-dating	1.06	1.00	0	4	.35	.12
discrepancy-homework	1.16	1.11	0	4	1.78	.90
discrepancy-chores	1.10	1.07	0	4	1.06	1.14
discrepancy-peers	1.18	1.11	0	4	1.53	1.72

## Latent Class Analysis: Research Question 1 & 2

### Overview.

**Parameter overview.** LCA is used to summarize the response patterns among a set of categorical manifest indicators through a set of mutually exclusive and exhaustive latent classes (Collins & Lanza, 2010). Two parameters are generated:  $\gamma$  and  $\rho$ . The  $\gamma$  parameter indicates the prevalence of latent classes in the sample, or what percentage of the sample belongs to each specific latent class. The  $\rho$  parameter indicates the item response probabilities conditional on latent classes or the probability of endorsing specific manifest items by an individual who falls into a particular latent class.

**Model selection process.** A variety of fit indices and information criteria statistics are generated by LCA (Collins & Lanza, 2010; Nylund et al., 2007). Fit indices include log-likelihood and information-based criteria such as the likelihood ratio  $\chi^2$ , the  $G^2$ , the Akaike information criterion (AIC; Akaike, 1987), the Bayesian information criterion (BIC; Schwartz, 1978), the consistent AIC (CAIC; Bozdogan, 1987), and the adjusted BIC (Sclove, 1987). The information-based criteria are typically used for model selection because values of these indices decrease to a minimum until the best-fitting model is reached, then level off or increase again. For example, if a 4-class solution fits the data best, the value of information statistics would decrease from a 1-class solution to a 2-class solution to a 3-class solution to a 4-class solution; then the downward trend would



reverse and values of the information criteria increase when a 5-class model is fit to the data. Nylund et al.'s simulation study suggested that although BIC performs best for model selection among the fit indices, a bootstrapped likelihood ratio test provides the most consistent indicator of the best-fitting solution. The bootstrap technique adopted in this project compares the difference in log likelihoods between the  $k-1$  and  $k$  class models directly against the difference distribution generated by simulated random samples (SimulateLcaDataset SAS Macro, Version 1.1.0; Dziak, Lanza, & Xu, 2011). The resulting  $p$  value indicates whether the null hypothesis, which states that the  $k-1$  class model is the true model that describe population characteristics, should be rejected, and the alternative  $k$  class model should be selected instead. Consequently, the LCA model selection process in this project follows two steps. First, information criteria were compared for 1- to 6-class models. If the turning point was not clear-cut for BIC, the bootstrap technique outlined above was used to determine the model of choice.

***Principles of labeling.*** After an LCA model is selected, labels need to be assigned to the latent classes which represent subgroups in the sample (Collins & Lanza, 2010). In labeling, the following principles were followed: (a) using labels that summarized the response patterns, (b) using labels that had been used in the literature, and (c) using labels that denoted literature-based constructs.

#### **Parental attitudes towards decision authority.**

Responses were collapsed from five categories to three categories, based on consideration of sample size restriction and model interpretability. The categories of *parent primarily* and *parent alone* were recoded as 1 (parent-oriented decision making);

the category of *parent and child together* was recoded as 2 (mutual decision making); the categories of *child primarily* and *child alone* were recoded as 3 (child-oriented decision making). Fit indices for the six LCA models for parental attitudes towards decision authority were presented in Table 8 and Figure 2.

Table 8

*Summary of Information for Selecting the Number of Latent Classes of Parental Attitudes towards Decision Authority*

	1-class	2-class	3-class	4-class	<b>5-class</b>	6-class
Log-likelihood:	-4231.32	-3756.16	-3569.6	-3478.5	<b>-3410.03</b>	-3370.97
G-squared:	2406.98	1456.65	1083.54	901.32	<b>764.39</b>	686.28
AIC:	2434.98	1514.65	1171.54	1019.32	<b>912.39</b>	864.28
BIC:	2497.62	1644.4	1368.39	1283.28	<b>1243.46</b>	1262.45
CAIC:	2511.62	1673.4	1412.39	1342.28	<b>1317.46</b>	1351.45
Adjusted BIC:	2453.17	1552.32	1228.69	1095.96	<b>1008.51</b>	979.88

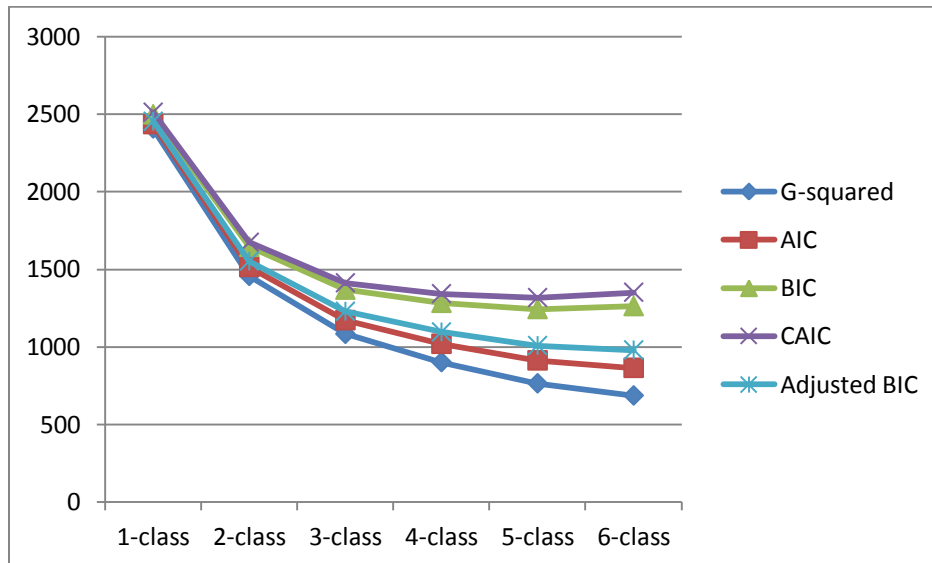


Figure 2. Fit Indices for the Latent Class Models of Parental Attitudes towards Decision Authority.

They showed that values of the BIC dropped steadily from the 1-class model until the 5-class model, then increased again for the 6-class model. Thus, the 5-class model was chosen as the most plausible model for further examination. Inspection of the  $\rho$  values for the 5-class model suggested that each latent class was characterized by clear-cut, distinct item-response patterns, indicating a high level of homogeneity and separation (Table 9). As such, the 5-class model was adopted as the final model for parental attitudes towards decision authority.

Table 9

*Item-Response Probabilities ( $\rho$ ) from Five-Latent-Class Model of Parental Attitudes towards Decision Authority*

		Latent Class 1 (democratic)	Latent Class 2 (practical)	Latent Class 3 (social)	Latent Class 4 (authoritarian)	Latent Class 5 (independent)
Latent Class Prevalence (%)		14%	34%	29%	10%	14%
Drugs	parent-oriented	0.0018	<b>0.925</b>	<b>0.7703</b>	<b>0.9838</b>	0.2311
	mutual	<b>0.9981</b>	0.066	0.2296	0.0012	<b>0.4103</b>
	child-oriented	0.0001	0.009	0.0001	0.0151	<b>0.3586</b>
Internet Café	parent-oriented	0.0034	<b>0.9525</b>	<b>0.828</b>	<b>0.9787</b>	0.0906
	mutual	<b>0.9965</b>	0.0225	0.1717	0.0211	<b>0.4784</b>
	child-oriented	0.0002	0.025	0.0003	0.0002	<b>0.4311</b>
Going out	parent-oriented	0.0005	<b>0.2657</b>	0.1462	<b>0.9186</b>	0.0613
	mutual	<b>0.987</b>	<b>0.3468</b>	<b>0.7564</b>	0.0781	<b>0.4846</b>
	child-oriented	0.0124	<b>0.3875</b>	0.0974	0.0033	<b>0.4542</b>
Dating	parent-oriented	0.0114	<b>0.5147</b>	0.3648	<b>0.9554</b>	0.1107
	mutual	<b>0.988</b>	0.2347	<b>0.6111</b>	0.0417	<b>0.4554</b>
	child-oriented	0.0006	0.2506	0.0241	0.0029	<b>0.4338</b>
Homework	parent-oriented	0.0004	0.0854	0.1667	<b>0.7979</b>	0.0017
	mutual	<b>0.953</b>	0.045	0.3301	0.0762	0.0449
	child-oriented	0.0466	<b>0.8696</b>	<b>0.5032</b>	0.1259	<b>0.9534</b>
Chores	parent-oriented	0.0006	0.1714	0.1687	<b>0.8449</b>	0.1364
	mutual	<b>0.974</b>	0.087	<b>0.3902</b>	0.0431	0.1
	child-oriented	0.0254	<b>0.7416</b>	<b>0.4411</b>	0.112	<b>0.7636</b>
Peers	parent-oriented	0.0004	0.1899	0.0694	<b>0.7918</b>	0.0279
	mutual	<b>0.9977</b>	0.2168	<b>0.8252</b>	0.1386	0.2949
	child-oriented	0.0019	<b>0.5933</b>	0.1054	0.0696	<b>0.6772</b>

As indicated in Table 9, individuals in Class 1 tended to select the “mutual” option uniformly on all issues. In other words, this subgroup of parents believed that decision-making should be based on mutual agreement between parents and children. Therefore, this latent class was labeled “parent: democratic” and accounted for 14% of the sample.

Parents in Class 2 tended to believe that parents should make decisions on issues concerning drugs, internet café, and dating, whereas children should make decisions or participate in decision-making for issues concerning homework, chores, and peers. Response probabilities for the issue of going out virtually split evenly across the three categories, which suggested that the item of going out was not a good indicator for this latent class. The response pattern characterizing this latent class indicated that parents should make decisions on prudential issues and children should make decisions on personal issues, thus this latent class was labeled “parent: practical.” It accounted for 34% of the sample.

Parents in Class 3 were similar to parents in Class 2 except that this subgroup of parents believed multifaceted issues (dating, going out, and peers) should be decided based on mutual agreement between parents and adolescents instead of parent alone or adolescent opinions alone. This latent class was labeled “parent: social” to differentiate it from the second latent class, and to emphasize that this subgroup of parents were primarily concerned about social issues. Specifically, members of Latent Class 3 endorsed parent-oriented decision making for issues concerning drugs and internet café, and mutual decision-making concerning going out, dating, and peers, but child-oriented

decision making concerning homework and chores. This group accounted for 29% of the sample.

Parents in Class 4 tended to believe that parents should have decision authority over all issues, and this latent class was labeled “parent: authoritarian.” It accounted for 10% of the sample.

Finally, parents in Class 5 tended to believe that decision authority over all issues should either be held by children alone or shared between parents and children. Thus, this latent class was labeled “parent: independent,” connoting the fact that this subgroup of parents supported independent decision-making by adolescent children. This group accounted for 14% of the sample.

### **Parenting practices.**

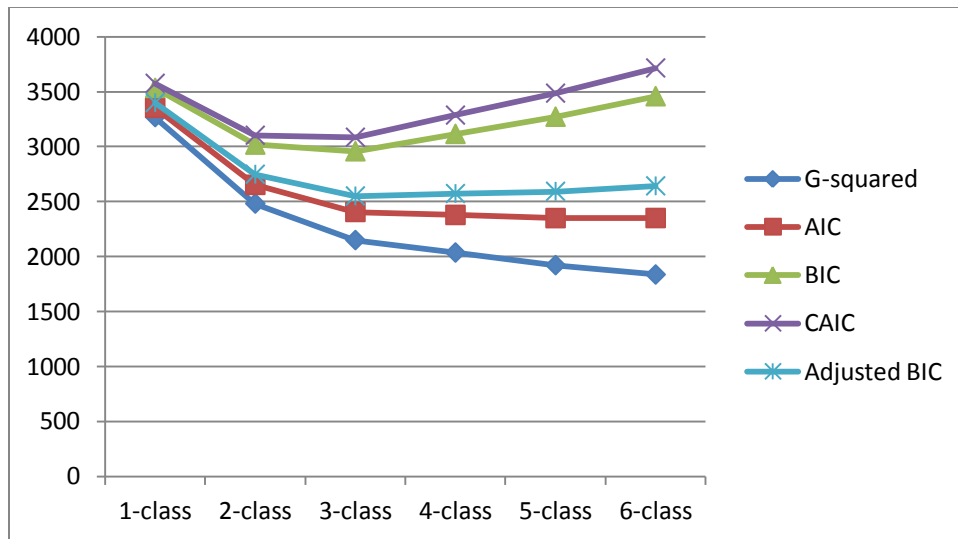
Six LCA models for parenting practices were estimated and results are presented in Table 10 and Figure 3. Values of the AIC and adjusted BIC decreased from the 1-class model until the 4-class model, and then started to increase. The turning point for the BIC and CAIC, however, lay in the 3-class model. Further, values of all information criteria started to decrease from the 5-class model, meaning that the best-fitting model should not have more than four latent classes (Collins & Lanza, 2010). Thus, the bootstrap procedure was used to determine whether to adopt the 3-class model or the 4-class model. Results suggested that the 4-class model fit significantly better than the 3-class model. Consequently, the 4-class model was retained as the final model, (see Table 11). Inspection of the  $\rho$  parameters revealed that each latent class was characterized by a unique pattern, which provided support for a high degree of homogeneity within each

latent class and separation between latent classes.

*Table 10*

*Summary of Information for Selecting the Number of Latent Classes of Parenting Practices*

	1-class	2-class	3-class	<b>4-class</b>	5-class	6-class
Log-likelihood:	-3776.17	-3401.32	-3247.58	<b>-3176.89</b>	-3133.85	-3090.35
G-squared:	2735.37	1985.68	1678.21	<b>1536.81</b>	1450.75	1363.75
AIC:	2791.37	2099.68	1850.21	<b>1766.81</b>	1738.75	1709.75
BIC:	2912.1	2345.45	2221.02	<b>2262.66</b>	2359.64	2455.68
CAIC:	2940.1	2402.45	2307.02	<b>2377.66</b>	2503.64	2628.68
Adjusted BIC:	2823.22	2164.5	1948.01	<b>1897.6</b>	1902.52	1906.5



*Figure 3. Fit Indices for the Latent Class Models of Parenting Practices.*

As indicated in Table 11, parents in Class 1 were highly likely to use peaceful reasoning when communicating and enforcing rules across all issues. Therefore, this latent class was labeled “reasoning” and accounted for 44% of the sample.

Parents in Class 2 seemed to be less clear than those in Class 1 in terms of what they did to enforce rules. They seemed not to be concerned about issues regarding internet café and going out, whereas they were likely to nag children about homework. For other issues, they either did not have explicit rules (“never really talked about it”) or used peaceful reasoning. These parents seemed to trust that their children were well-behaved and mature adolescents, and their major expectation lay in academics. This latent class was labeled “trusting” and accounted for about 11% of the sample.

Parents in Class 3 either used peaceful reasoning or simply did not have an explicit rule for any of the issues, hence the label “laidback.” This group accounted for 29% of the sample.

Parents in Class 4 used peaceful reasoning and nagging about homework, going out, chores, and peers; and used peaceful reasoning for issues related to social life (dating, internet café, going out, drugs, peers). This latent class was labeled “attentive” because the response pattern suggested that these parents were very involved in their adolescents’ everyday lives. This group accounted for 16% of the sample.

*Table 11*

*Item-Response Probabilities ( $\rho$ ) from Four-Latent-Class Model of Parenting Practices*

		Latent Class 1 (reasoning)	Latent Class 2 (trusting)	Latent Class 3 (laid-back)	Latent Class 4 (attentive)
Latent Class Prevalence (%)		44%	11%	29%	16%
Dating	Never talked about it	.0897	<b>.2524</b>	<b>.5542</b>	.1136
	Peaceful reasoning	<b>.8833</b>	<b>.3634</b>	<b>.4009</b>	<b>.5769</b>
	Nagging	.0145	.0835	.0119	.1998



	Reward	.0082	0	0	.012
	No such a rule	.0042	<b>.3007</b>	.0329	.0977
<hr/>					
Internet					
Café	Never talked about it	.0488	<b>.483</b>	<b>.8221</b>	.1579
	Peaceful reasoning	<b>.9249</b>	.0801	.1165	<b>.5669</b>
	Nagging	.0081	.0725	.003	.2199
	Reward	.0037	.0002	0	.055
	No such a rule	.0145	<b>.3642</b>	.0584	.0004
<hr/>					
Homework	Never talked about it	.0084	.0255	.2905	.0313
	Peaceful reasoning	<b>.9173</b>	<b>.348</b>	<b>.5566</b>	.1805
	Nagging	.0491	<b>.4794</b>	.0955	<b>.6351</b>
	Reward	.0251	.0003	.0574	.1254
	No such a rule	0	.1469	0	.0277
<hr/>					
Going out	Never talked about it	.0888	.0539	<b>.6136</b>	.2053
	Peaceful reasoning	<b>.8294</b>	.1226	.298	<b>.2801</b>
	Nagging	.0203	.1738	.0511	<b>.4061</b>
	Reward	0	.0245	.0077	.0838
	No such a rule	.0615	<b>.6253</b>	.0296	.0247
<hr/>					
Chores	Never talked about it	.0498	<b>.2865</b>	<b>.575</b>	.2022
	Peaceful reasoning	<b>.851</b>	<b>.2803</b>	.3228	.0287
	Nagging	.027	.1798	.0801	<b>.4964</b>
	Reward	.0318	.0755	.022	.2721
	No such a rule	.0404	.178	.0001	.0006
<hr/>					
Drugs	Never talked about it	.0469	<b>.544</b>	<b>.6927</b>	.1053
	Peaceful reasoning	<b>.9406</b>	.2489	.2539	<b>.5905</b>
	Nagging	.0004	.0004	.0381	.214
	Reward	0	.0001	.0079	.0767
	No such a rule	.0121	.2066	.0073	.0134
<hr/>					
Peers	Never talked about it	.0365	.2134	<b>.5283</b>	.0777
	Peaceful reasoning	<b>.9266</b>	<b>.4269</b>	<b>.4689</b>	<b>.5301</b>
	Nagging	.0161	.1649	.0027	<b>.3254</b>
	Reward	0	0	0	.0665
	No such a rule	.0209	.1948	.0001	.0002

### Adolescent attitudes towards decision authority.

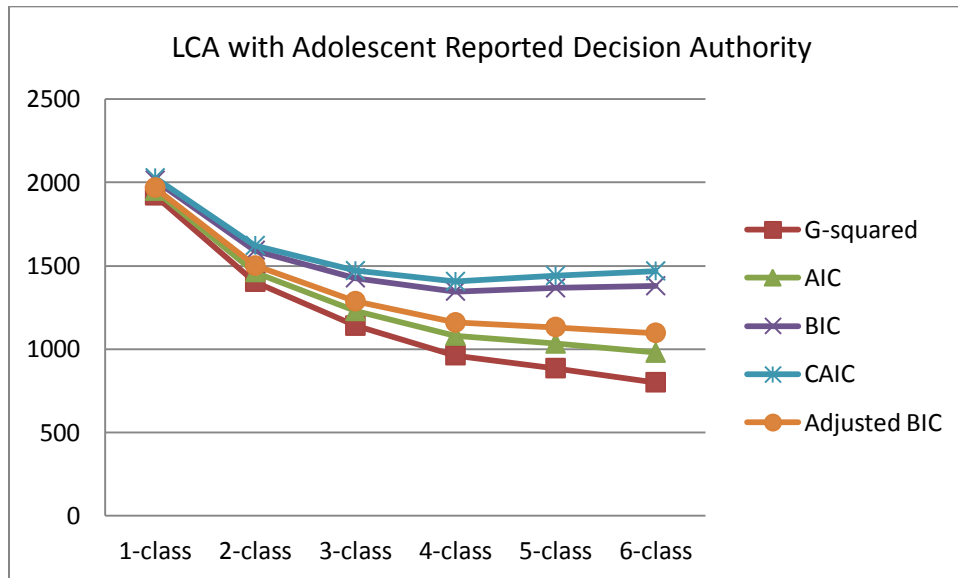
Results of the six LCA models of adolescent attitudes towards decision authority are presented in Table 12 and Figure 4. Values of BIC dropped steadily from the 1-class

model till the 4-class model, and then started to increase from the 5-class model. Thus, the 4-class model was chosen as the initial model. Inspection of the  $\rho$  values for the 4-class model suggested high levels of within-group homogeneity and between-group separation (Table 13). As a result, the 4-class model was considered the best-fitting model describing the patterns of responses for adolescent attitudes towards decision authority.

*Table 12*

*Summary of Information for Selecting the Number of Latent Classes of Adolescent Attitudes towards Decision Authority*

	1-class	2-class	3-class	<b>4-class</b>	5-class	6-class
Log-likelihood:	-4398.26	-4139	-4007.12	<b>-3918.43</b>	-3879.57	-3837.19
G-squared:	1922.35	1403.83	1140.07	<b>962.68</b>	884.97	800.2
AIC:	1950.35	1461.83	1228.07	<b>1080.68</b>	1032.97	978.2
BIC:	2013.48	1592.59	1426.46	<b>1346.7</b>	1366.62	1379.48
CAIC:	2027.48	1621.59	1470.46	<b>1405.7</b>	1440.62	1468.48
Adjusted BIC:	1969.03	1500.51	1286.75	<b>1159.37</b>	1131.66	1096.9



*Figure 4. Fit Indices for the Latent Class Models of Adolescent Attitudes towards*

### *Decision Authority.*

As indicated in Table 13, adolescents in Class 1 supported mutual decision-making in general, which resulted in this class being labeled “adolescent: democratic.” This group accounted for 11% of the sample. Adolescents in Class 2 supported child-oriented decision making for all issues, therefore this latent class was labeled “adolescent: permissive.” This group accounted for 24% of the sample. In contrast, adolescents in Class 3 believed that parents should have decision authority over all issues, and therefore were labeled “adolescent: authoritarian.” This group accounted for 16% of the sample. Finally, adolescents in Class 4 believed that parents should have decision authority over prudential issues (dating, internet café), but adolescents should have decision authority over personal issues (homework, chores). Moreover, they supported parent-oriented decision authority for the multifaceted issue of dating, child-oriented for the multifaceted issue of peers, and either mutual or child-oriented decision making for the multifaceted issue of going out. Taken together, this latent class was labeled “adolescent: practical” and accounted for 49% of the sample.

*Table 13*

*Item-Response Probabilities ( $\rho$ ) from Four-Latent-Class Model of Adolescent Attitudes towards Decision Authority*

		Latent Class 1 (democratic)	Latent Class 2 (permissive)	Latent Class 3 (authoritarian)	Latent Class 4 (practical)
Latent Class Prevalence (%)		11%	24%	16%	49%
Drugs	parent-oriented	0.0935	0.2362	<b>0.9391</b>	<b>0.9294</b>
	mutual	<b>0.8582</b>	0.3242	0.0494	0.0501
	child-oriented	0.0484	<b>0.4396</b>	0.0115	0.0204

Internet					
Café	parent-oriented	0.0121	0.2179	<b>0.973</b>	<b>0.9618</b>
	mutual	<b>0.961</b>	0.274	0.0187	0.0369
	child-oriented	0.0269	<b>0.5081</b>	0.0083	0.0014
Going out	parent-oriented	0.0788	0.1101	<b>0.4941</b>	0.176
	mutual	<b>0.7961</b>	0.2929	0.3774	<b>0.4532</b>
	child-oriented	0.1251	<b>0.597</b>	0.1285	<b>0.3709</b>
Dating	parent-oriented	0.2391	0.1458	<b>0.8294</b>	<b>0.4645</b>
	mutual	<b>0.7454</b>	0.2656	0.1407	0.3165
	child-oriented	0.0156	<b>0.5886</b>	0.03	0.219
Homework	parent-oriented	0.0235	0.0812	<b>0.7303</b>	0.0886
	mutual	<b>0.421</b>	0.0439	0.1386	0.096
	child-oriented	<b>0.5555</b>	<b>0.875</b>	0.1312	<b>0.8154</b>
Chores	parent-oriented	0.0927	0.1148	<b>0.6866</b>	0.1443
	mutual	<b>0.4934</b>	0.0768	0.1959	0.1088
	child-oriented	<b>0.4139</b>	<b>0.8084</b>	0.1175	<b>0.7469</b>
Peers	parent-oriented	0.0065	0.036	<b>0.5373</b>	0.1051
	mutual	<b>0.7211</b>	0.1803	0.316	0.3369
	child-oriented	0.2724	<b>0.7837</b>	0.1467	<b>0.558</b>

### Reasons for adolescent conformity.

Results of the LCA models of reasons for adolescent conformity are presented in Table 14 and Figure 5. The BIC suggested that the 4-class model was optimal. Considering latent class homogeneity and separation, the 4-class model was adopted as the most plausible model. Each latent class was characterized by a clear pattern of item-response probabilities (see Table 15).

Table 14

*Summary of Information for Selecting the Number of Latent Classes of Reasons for Adolescent Conformity*

	1-class	2-class	3-class	<b>4-class</b>	5-class	6-class
Log-likelihood:	-4608.5	-4030.18	-3795.33	<b>-3684.15</b>	-3638.8	-3613.9
G-squared:	3927.14	2770.5	2300.8	<b>2078.44</b>	1987.74	1937.94

AIC:	3983.14	2884.5	2472.8	<b>2308.44</b>	2275.74	2283.94
BIC:	4103.66	3129.86	2842.98	<b>2803.45</b>	2895.59	3028.61
CAIC:	4131.66	3186.86	2928.98	<b>2918.45</b>	3039.59	3201.61
Adjusted BIC:	4014.78	2948.91	2569.98	<b>2438.4</b>	2438.47	2479.43

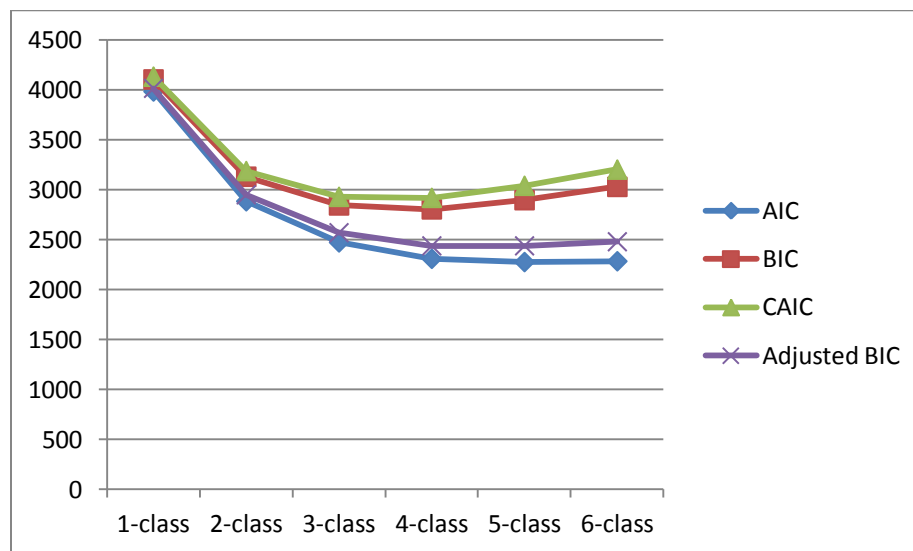


Figure 5. Fit Indices for the Latent Class Models of Reasons for Adolescent Conformity.

Patterns of responses for 4-class model are presented in Table 15. Adolescents in Class 1 reported that they followed rules because they should do what they parents told them to across all issues, which was in similar spirit with Peterson et al.'s (1986) construct of external compliance. Thus, this latent class was labeled “external compliance” and accounted for 39% of the sample.

Adolescents in Class 2 tended to consider their parents to be reasonable on all issues except for internet café and drugs. At the same time, they believed that the way they behaved was due to their personality rather than parental pressure for all issues except homework. For homework, they believed that they should do what they parents told them to do. Therefore, this latent class was labeled “personality” and it accounted for

22% of the sample.

Adolescents in Class 3 believed that every issue was their own personal business. Nevertheless, they still suggested that they should do what their parents told them to on issues concerning internet café, chores, drugs, and peers. They also considered their parents to be reasonable in terms of the dating issue. Taken together, this subgroup of adolescents recognize authority on both the parental side and the adolescent side in explaining their behaviors, hence this group was labeled “dual.” This latent class accounted for 12% of the sample.

Finally, adolescents in Class 4 fit with Peterson et al.’s description of internal conformity. They reported that they agreed with their parents and thought that their parents were reasonable on all issues. This latent class was labeled “internal conformity” and accounted for 28% of the sample.

Table 15

*Item-Response Probabilities ( $\rho$ ) from Four-Latent-Class Model of Reasons of Adolescent Conformity*

		Latent Class 1 (external compliance)	Latent Class 2 (personality)	Latent Class 3 (dual)	Latent Class 4 (internal conformity)
Latent Class Prevalence (%)		39%	22%	12%	28%
Dating	Do what my parents tell me to	<b>0.7306</b>	0.1168	0.1861	0.1225
	Personal business	0.0053	0.0832	<b>0.3954</b>	0.0317
	Agree with parents, they are reasonable	0.2102	<b>0.3345</b>	<b>0.2592</b>	<b>0.8162</b>
	Personality	0.0346	<b>0.4655</b>	0.1413	0.0232
	Do not have time / can't control myself	0.0192	0	0.0179	0.0064
Internet Café	Do what my parents tell me to	<b>0.8628</b>	0.0729	<b>0.3747</b>	0.1919
	Personal business	0.0051	0.033	<b>0.3358</b>	0.0002
	Agree with parents, they are reasonable	0.0834	0.0761	0.2057	<b>0.7497</b>
	Personality	0.0487	<b>0.8106</b>	0.0321	0.0509
	Do not have time / can't control myself	0	0.0073	0.0516	0.0072
Homework	Do what my parents tell me to	<b>0.7871</b>	<b>0.2289</b>	0.1923	0.123
	Personal business	0.0282	0.143	<b>0.4835</b>	0.0295
	Agree with parents, they are reasonable	0.1275	<b>0.2578</b>	0.2007	<b>0.7554</b>
	Personality	0.0355	<b>0.2642</b>	0.0007	0.0574
	Do not have time / can't control myself	0.0217	0.1061	0.1228	0.0348
Going out	Do what my parents tell me to	<b>0.8591</b>	0.1669	0.1304	0.1757
	Personal business	0.0192	0.1339	<b>0.5366</b>	0.0431
	Agree with parents, they are reasonable	0.083	<b>0.2855</b>	0.1532	<b>0.7217</b>
	Personality	0.0305	<b>0.3444</b>	0.0203	0.0367
	Do not have time / can't control myself	0.0082	0.0693	0.1595	0.0229

Chores	Do what my parents tell me to	<b>0.8063</b>	0.1576	<b>0.3887</b>	0.1859
	Personal business	0.0108	0.0907	<b>0.3654</b>	0.0001
	Agree with parents, they are reasonable	0.0912	0.2261	0.0766	<b>0.6186</b>
	Personality	0.0409	<b>0.3304</b>	0.1314	0.1164
	Do not have time / can't control myself	0.0508	0.1951	0.038	0.0789
Drugs	Do what my parents tell me to	<b>0.8652</b>	0.0624	<b>0.4791</b>	0.138
	Personal business	0.0137	0.0001	0.2338	0.0001
	Agree with parents, they are reasonable	0.0718	0.1256	0.1859	<b>0.82</b>
	Personality	0.0391	<b>0.8119</b>	0.0659	0.042
	Do not have time / can't control myself	0.0101	0	0.0353	0
Peers	Do what my parents tell me to	<b>0.8649</b>	0.0454	<b>0.2862</b>	0.0618
	Personal business	0.0443	0.0637	<b>0.3676</b>	0.0241
	Agree with parents, they are reasonable	0.065	0.296	<b>0.2146</b>	<b>0.8674</b>
	Personality	0.0085	<b>0.4494</b>	0.0006	0.02
	Do not have time / can't control myself	0.0174	0.1455	0.1311	0.0267



## Configural Frequency Analysis: Research Question 3 & 4

### Overview.

The most basic purpose of CFA is to identify configurations of categories that are observed more or less often than expected, based on a priori specified log-linear model (von Eye, 2002). Configurations, which are used to describe groups of individuals, are formed by cross-classifying of one or more categorical variables. Specifically, CFA was used to identify patterns of parenting practices (summarized by the latent classes) that tended to co-occur with patterns of reasons for adolescent conformity (as indexed by latent classes of adolescents' explanations of their behavioral responses to parenting practices). Next, CFA was used to identify patterns of parental attitudes towards decision authority that tended to co-occur with pattern of adolescent attitudes towards decision authority. Finally, CFA was used to examine whether the specific social classes tended to demonstrate specific patterns of parenting practices, reasons for adolescent conformity, as well as parental and adolescent attitudes towards decision authority. Configurations that tend to coexist are called *types*, whereas configurations that occur less frequently than expected are called *antitypes*.

**Model specification.** The model specification involves selecting the CFA base model, the statistical test criteria, and the procedure for Type I error ( $\alpha$ ) protection because configurations are estimated cell-by-cell instead of globally as in typical chi-square goodness-of-fit tests. The base model is typically a main-effect model that references observed cell frequencies against the cell frequencies expected under a marginal model. If the observed frequencies in a cross-tabulation are consistent with the

expected frequencies, there are no effects beyond what is included in the base model. On the other hand, if observed frequencies are higher or lower than the expected frequencies at above chance levels, the null model does not explain the over- or under-abundance of observations within particular cells of the cross-tabulation. For the current project, a main-effects-only base model was specified because interactions between categories (latent classes), rather than a specific category, were the focus in describing parent–adolescent relationships in handling authority issues. In all CFA analyses, a z-test was selected as the test of significance and the Holland-Copenhaver procedure was used to protect against Type I errors, because both types and antitypes were of interest in this project (von Eye, personal communications).

***Interpretation of types and antitypes.*** If, for example, in a CFA model of the relationship between parental attitudes towards decision authority and adolescent attitudes towards decision authority, the frequency of the configuration “parent: authoritarian” and “adolescent: authoritarian” is higher than expected, this configuration is called a *type*, which means that parents who believe that parents should have decision authority across all issues tend to have adolescent children who believe the same way. In contrast, if this configuration occurs less frequently than expected, it is called an *antitype*, which means that parents who hold authoritarian beliefs are unlikely to have children who also support parental decision authority. Both types and antitypes are important because types indicate which cells on the cross-tabulation of parent and adolescent typologies are salient or noteworthy, as indexed by their relative frequencies of occurrence.

### **Parental and adolescent attitudes towards decision authority.**

As shown in Table 16, CFA of parental and adolescent attitudes towards decision authority revealed two types and one antitype. First, the configuration between “parent: independent” and “adolescent: permissive” was a type, suggesting that it was common for both parents and adolescents to believe that children should have decision authority across all issues. Second, the configuration between “parent: authoritarian” and “adolescent: authoritarian” was another type, suggesting that it was also common for both parents and adolescent to believe that parents should have decision authority across all issues.

The only antitype was the configuration between “parent: independent” and “adolescent: practical.” In this group, parents believed that children should have decision authority across all issues, but adolescents believed that parents should still hold decision authority over prudential issues. Such families were uncommon perhaps because of the mismatch between parent and adolescent attitudes. It was unusual for parents to believe in more child-oriented decision making than did children themselves. All other co-occurrences in the table were unremarkable in their salience.

Table 16

*Cross-Tabulation of Parental Attitudes against Adolescent Attitudes*

Parental attitudes * Adolescent attitudes					
Parent	Adolescent				
Observed frequency/ Expected frequency	democratic	permissive	authoritarian	practical	Total
Democratic	18 9.7706	18 18.727	15 12.62	33 42.882	84
Independent	12 9.8869	<b>44</b> <b>18.95</b>	5 12.771	<b>24</b> <b>43.393</b>	85
Authoritarian	2 6.7464	8 12.931	<b>19</b> <b>8.7141</b>	29 29.609	58
Practical	19 25.008	43 47.932	20 32.302	133 109.76	215
Social	21 20.588	25 39.46	34 26.593	97 90.359	177
Total	72	138	93	316	619
Frequency Missing = 79					

*Note.* In each cell, the numbers on the first rows above represent observed frequencies, and the numbers on the rows below represent the expected frequencies. Bolded cells are types, and italicized bolded cells are antitypes.

**Parenting practices and reasons for adolescent conformity.**

Table 17 described the observed and expected frequencies of configurations between LCA-derived categories of parenting practices and LCA-derived categories of reasons for adolescent conformity. Two configurations turned out to be types and two turned out to be antitypes. The configuration between “reasoning” and “internal conformity” was estimated to be a type. In families within which parents used reasoning consistently across all issues, children tended to demonstrate internal conformity. In other words, children in such families conformed to parental expectations because they considered their parents’ opinions to be reasonable, not just due to fear of punishment or

surveillance. The configuration between “trusting” and “personality” was another type. On the one hand, those children suggested that refraining from certain behaviors (drugs and internet café) was completely due to their personalities instead of due to parental pressure. They also reported that they generally conformed to parental expectations because they considered their parents to be reasonable – except for the issue of homework, for which they suggested they should do what their parents told them to. On the other hand, these parents were not concerned about prudential issues (drugs and internet café) and tended to use reasoning for most issues, except that sometimes they nagged about homework. Taken together, parents in this configuration were most concerned about academic issues and their adolescent children were accordingly most pressured by academic issues. Moreover, both parents and adolescents in this configuration had a mutual understanding that there was no need to worry about prudential issues.

In contrast, the configuration between “reasoning” and “personality” was an antitype, meaning that parents who used reasoning and children who weighed personality more heavily than parental rules in explaining their behaviors tended not to go together. It seems to be unusual for parents to stay involved and concerned (albeit with reasoning) even when there seemed to be no need to worry as the children are well-behaved by personality. Additionally, the configuration between “laidback” and “internal conformity” was also an antitype. This seemed to be an unreasonable phenomenon when the parents tended not to have explicit rules, but the adolescent children reported that they conform to parental expectations because they agreed that their parents were reasonable.

Table 17

*Cross-Tabulation of Parenting Practices against Reasons for Adolescent Conformity*

Parenting practices * Reasons for adolescent conformity					
Parenting Practices	Reasons for adolescent conformity				
Observed frequency/ Expected frequency	Internal conformity	Personality	Dual	External Compliance	Total
Reasoning	<b>99</b> <b>66.573</b>	<b>21</b> <b>50.596</b>	17 28.404	100 91.427	237
Trusting	7 16.292	<b>27</b> <b>12.382</b>	13 6.9513	11 22.375	58
Laid-back	<b>24</b> <b>43.539</b>	45 33.09	26 18.577	60 59.794	155
Attentive	20 23.596	21 17.933	8 10.067	35 32.404	84
Total	150	114	64	206	534
Frequency Missing = 164					

*Note.* In each cell, the numbers on the first rows above represent observed frequencies, and the numbers on the rows below represent the expected frequencies. Bolded cells are types, and italicized bolded cells are antitypes.

### **Social class and LCA-derived typologies.**

CFA was conducted between social class and each of the LCA-derived typologies (parenting practices, parental attitudes towards decision authority, reasons for adolescent conformity, and adolescent attitudes towards decision authority). Only one type emerged and there was no antitype (see Table 18). The configuration between the social class category of “Mixed 2” and the parenting practices category of “trusting” occurred more frequently than expected. This particular social class category involved one or both parents having either a middle-class occupation or a middle-class education. Parents in this group were more likely to be classified into the “trusting” subgroup based on the

characteristics of their parenting practices. That is, in families within which one or both parents have a mismatch between occupation and education, parents tended to trust their children on prudential issues, and instead were particularly concerned about their children's homework.

*Table 18*

*Cross-Tabulation of Parenting Practices against Social Class*

Parenting Practices by Social Class					
Parenting Practices	Social Class				
Observed frequency/ Expected frequency	Working Class	Middle Class	Mixed 1	Mixed 2	Total
Reasoning	158 154.49	5 7.2916	9 9.5702	39 39.648	211
Trusting	25 35.877	4 1.6933	1 2.2225	<b>19</b> <b>9.2073</b>	49
Laid-back	92 91.523	6 4.3197	9 5.6695	18 23.488	125
Attentive	64 57.11	1 2.6955	2 3.5378	11 14.657	78
Total	339	16	21	87	463
Frequency Missing = 235					

## **General Linear Modeling: Research Question 5 & 6**

### **Overview.**

GLM was utilized to link LCA-derived typologies and their combinations with adolescent psychosocial outcomes. Moreover, it was used to examine whether the types and antitypes identified by CFA had significant influences on the outcome indicators. Specifically, GLM was used to model the simultaneous effects of the independent variables and the control variables on each of the dependent variables: discrepancy between parental attitudes and adolescent attitudes in decision authority for each of the

seven issues (dating, internet café, homework, going out, chores, drugs, and peers), academic achievement, prosocial orientation, and sociability.

Independent variables included the followings: (a) typologies of parental attitudes towards decision authority (parent: democratic, parent: independent, parent: authoritarian, parent: practical, and parent: social), typologies of adolescent attitudes towards decision authority (adolescent: democratic, adolescent: permissive, adolescent: authoritarian, and adolescent: practical), typologies of parenting practices (reasoning, trusting, laid-back, and attentive), typologies of reasons for adolescent conformity (internal conformity, personality, dual, and external compliance), and (b) an interaction term between parental and adolescent attitudes towards decision authority, and an interaction term between parenting practices and reasons for adolescent conformity. Parent gender, child gender, and social class (middle class, working class, Mixed 1, and Mixed 2) were entered as control variables. Type III sum of squares were used in the tests of significance because the effect of individual predictors was considered in the presence of all other predictors. That is, the order of predictor entry in the model would not affect model specification by using Type III sum of squares. The GLM models were finalized by omitting the non-significant effects. The GLM assumptions, including homogeneity, normality, and independence of residuals, were examined and satisfied for all analyses. Significant main effects and interactions were probed graphically using least squares means (LS means) as all independent variables were categorical, and the distribution of the sample was unbalanced across cells.



The significant effects in the GLM models for each outcome are presented in Table 19. On the whole, results suggested that only the typologies of parental and adolescent attitudes towards decision authority consistently had significant effects on the adolescent outcome indicators. The interaction term between parenting practices and reasons for adolescent conformity, however, was not associated significantly with any of the outcome variables. Thus, this interaction term was dropped from the models and excluded from Table 19.

Parent–adolescent discrepancies in attitudes towards decision authority were predicted by the interaction term between typologies of parental attitudes and typologies of adolescent attitudes, except for discrepancy in the issue of internet café. In addition, parent–adolescent discrepancy in the issue of peers was associated significantly with reasons of adolescent conformity. Adolescent academic achievement was predicted by only adolescent-level characteristics (child gender and adolescent attitudes towards decision authority). Adolescent prosocial orientation was marginally predicted by the interaction term between typologies of parental attitudes and typologies of adolescent attitudes, and adolescent sociability was not associated with any of the predictors.

Finally, for each significant interaction term between parental and adolescent attitudes, pairwise comparisons were estimated with LS means to probe the nature of the interaction. With 20 combinations of parents' and adolescents' attitudinal typologies implied by the interaction term (five parent typologies by four adolescent typologies), 90 unique pair-wise comparisons were conducted. The Benjamini-Hochberg procedure (Benjamini & Hochberg, 1995; Thissen, Steinberg, & Kuang, 2002; Williams, Jones, &

Tukey, 1999) was utilized to control the  $\alpha$  values by protecting the false discovery rate, which was defined as “the average fraction of erroneous assertions among all confident directions asserted” (Williams et al., p. 44). Compared with the commonly used Bonferroni technique that controls the familywise error rate, the Benjamini-Hochberg approach was less stringent and yields greater power.

Table 19

*GLM Statistics for Significant Associations between Typologies and Outcome Indicators*

	Discrep': drugs	Discrep': café	Discrep': going out	Discrep': dating	Discrep': homework	Discrep': chores	Discrep': peers	GPA	Sociability	Prosocial Orientation
child gender					F=9.02 P<.01			F=8.88 p<.01		
social class										
reasons for conformity							F=3.27 P<.05			
parental attitudes		F=16.6 p<.01				F=4.01 p<.01				
adolescent attitudes	F=10.3 p<.01	F=3.86 p<.01	F=14.69 p<.01	F=4.25 p<.01	F=3.68 p<.05		F=4.17 p<.01	F=6.06 p<.01		
p-attitudes *										
c-attitudes	F=15.57 p<.01		F=22.27 p<.01	F=2.62 p<.01	F=2.81 p<.01	F=2.48 p<.01	F=4.02 p<.01			F=1.68 P=.07

**Predicting discrepancy between parental and adolescent attitudes across issues.**

Overall results concerning the set of discrepancy indicators suggested that relatively more parent–child disagreement was witnessed in families within which adolescents and parents leaned towards the opposite ends of decision authority. Further, the patterns of associations supported the validity of the latent class assignments (except for parenting practices, which was not associated significantly with any of the outcome variables). Significant effects are presented in Tables 20 - 26 for each of the discrepancy indicators

*Discrepancy regarding the issue of drugs.* Discrepancy between parental and adolescent attitudes towards decision authority in this issue was highest in families within which the adolescent children were classified into the “adolescent: permissive” category and parents were classified into the “parent: authoritarian” category. That is, parent–adolescent disagreement on the issue of drugs was highest when parents and adolescents held opposite viewpoints towards decision authority. In contrast, levels of disagreement were lowest among families within which both parents and adolescents believed in democratic decision-making. Additionally, when both the adolescents and parents supported parent-oriented decision making in the issue of drugs (e.g., parents in the “social” category and adolescents in the “authoritarian” category), disagreement was relatively low. Similarly, when parents and adolescents held compatible perspectives in terms of decision authority (e.g., parents in the “democratic” category and adolescents in the “permissive” category), disagreement was also low. Finally, the two CFA types

demonstrated relatively low levels of parent–adolescent discrepancy regarding the issue of drugs, and the CFA antitype demonstrated relatively high levels of discrepancy.

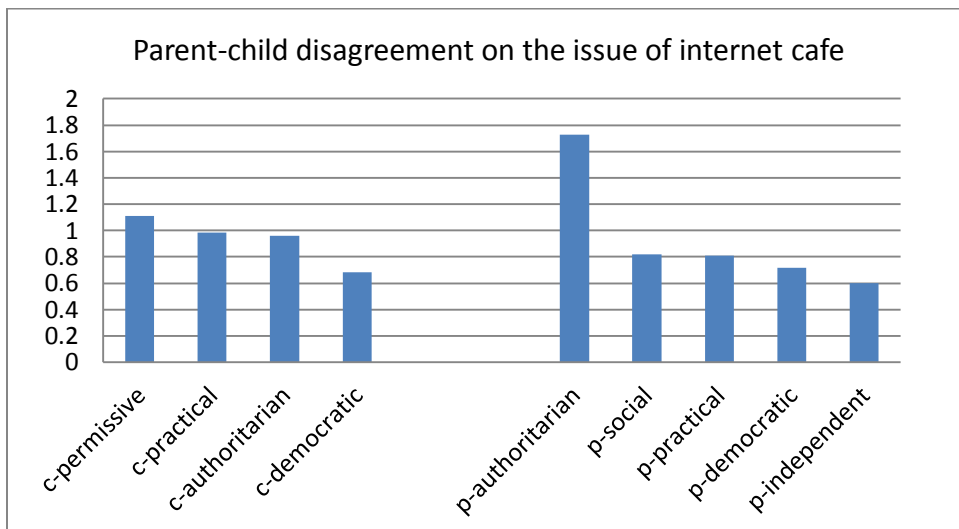
*Table 20*

*Different Levels of Disagreement on the Issue of Drugs Based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Disagreement on drugs
Level 1	authoritarian	permissive	2.88
	independent	authoritarian	2.00
Level 2	social	permissive	1.96
	practical	permissive	1.81
	democratic	practical	1.70
	<b><i>independent</i></b>	<b><i>practical</i></b>	1.67
	democratic	authoritarian	1.60
	practical	democratic	1.47
Level 3	social	democratic	1.14
	authoritarian	democratic	1.00
	<b>independent</b>	<b>permissive</b>	0.91
	social	practical	0.83
	independent	democratic	0.75
	practical	authoritarian	0.55
	<b>authoritarian</b>	<b>authoritarian</b>	0.53
	democratic	permissive	0.50
	authoritarian	practical	0.48
	practical	practical	0.47
Level 4	social	authoritarian	0.35
	democratic	democratic	0.17

*Note.* Bolded combinations indicated CFA types; bolded, italicized combinations indicated CFA antitypes. Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in their attitudinal discrepancy in the issue of drugs.

***Discrepancy regarding the issue of internet café.*** For this issue, only the main effects of parental attitudes and adolescent attitudes, but not the interaction terms, were significant predictors. Families within which the adolescent children were classified into the category of “adolescent: democratic” witnessed relatively lower levels of parent–child discrepancy, compared with other adolescent typologies (see Figure 6). Also, the “parent: authoritarian” category was associated with distinctively higher levels of discrepancy, compared with other parent typologies.



*Figure 6. Variability in Parent–Adolescent Discrepancy in Attitudes towards Decision Authority in the Issue of Internet Café across Adolescents’ and Parents’ Attitudinal Typologies.*

***Discrepancy regarding the issue of going out.*** Similar to the issue of drugs, families in which parents and adolescents held opposite beliefs of decision authority had the highest levels of parent–child disagreement on the issue of going out. In general, when parents’ and adolescents’ general attitudes towards decision authority were compatible, either both supporting mutual or child-oriented decision making or both supporting parent-oriented decision making, they had lower levels of disagreement. The two types were associated with relatively low levels of discrepancy, and the antitype was associated with relatively high levels of discrepancy.

*Table 21*

*Different Levels of Disagreement on the Issue of Going Out based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Disagreement on going out
Level 1	independent	authoritarian	2.60
	authoritarian	permissive	2.13
	social	permissive	2.12
Level 2	practical	permissive	1.95
	<b><i>independent</i></b>	<b><i>practical</i></b>	1.88
	democratic	practical	1.58
	practical	democratic	1.53
	democratic	authoritarian	1.47
Level 3	authoritarian	democratic	1.00
	social	democratic	1.00
	democratic	permissive	0.89
	<b>independent</b>	<b>permissive</b>	0.75

	<b>authoritarian</b>	<b>authoritarian</b>	0.68
	social	authoritarian	0.62
	social	practical	0.59
	practical	authoritarian	0.58
	practical	practical	0.47
Level 4	independent	democratic	0.33
	authoritarian	practical	0.31
	democratic	democratic	0

*Note.* Bolded combinations indicated CFA types; bolded, italicized combinations indicated CFA antitypes. Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in their attitudinal discrepancy in the issue of going out.

***Discrepancy regarding the issue of dating.*** Comparable to the issue of going out, combinations of the “parent: authoritarian” category and the “adolescent: permissive” category, the “parent: independent” category and the “adolescent: authoritarian” category, and the “parent: social” category and the “adolescent: permissive” category were associated with the highest levels of parent–adolescent disagreement on the issue of dating. In contrast, when both parents and adolescents support either parent-oriented decision making (CFA type) or mutual decision making, were associated with the lowest levels of disagreement.



Table 22

*Different Levels of Disagreement on the Issue of Dating Based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Disagreement on dating
Level 1	authoritarian	permissive	2.25
	independent	authoritarian	2.00
	social	permissive	1.60
Level 2	practical	permissive	1.30
	authoritarian	practical	1.24
	practical	democratic	1.11
	democratic	practical	1.09
	<b>independent</b>	<b>permissive</b>	1.09
	social	authoritarian	1.09
	practical	practical	1.08
	<b><i>independent</i></b>	<b><i>practical</i></b>	1.08
	democratic	authoritarian	1.00
	authoritarian	democratic	1.00
	social	practical	0.98
	practical	authoritarian	0.95
	social	democratic	0.90
	democratic	permissive	0.83
Level 3	<b>authoritarian</b>	<b>authoritarian</b>	0.47
	democratic	democratic	0.44
	independent	democratic	0.42

*Note.* Bolded combinations indicated CFA types; bolded, italicized combinations indicated CFA antitypes. Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in their attitudinal discrepancy in the issue of dating.

***Discrepancy regarding the issue of homework.*** The same parent–adolescent combinations had the highest levels of disagreement on the issue of homework as on the issue of going out and dating, and to a lesser extent, as on the issue of drugs. Still, the combination between the “parent: democratic” category and the “adolescent: democratic” category had the lowest levels of disagreement as on other issues. The CFA types and antitypes, however, did not have notable effects on this outcome.

*Table 23*

*Different Levels of Disagreement on the Issue of Homework Based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Disagreement on homework
Level 1	authoritarian	permissive	2.35
	independent	authoritarian	2.23
	social	permissive	1.86
Level 2	democratic	authoritarian	1.51
	practical	authoritarian	1.41
	practical	democratic	1.40
	practical	permissive	1.27
	<b>authoritarian</b>	<b>authoritarian</b>	1.25
	social	practical	1.22
	<b><i>independent</i></b>	<b><i>practical</i></b>	1.20
	authoritarian	practical	1.19
	practical	practical	1.14
	authoritarian	democratic	1.14
	democratic	practical	1.09

	social	authoritarian	1.06
	<b>independent</b>	<b>permissive</b>	1.03
	independent	democratic	0.94
	democratic	permissive	0.90
Level 3	social	democratic	0.46
	democratic	democratic	0.31

*Note.* Bolded combinations indicated CFA types; bolded, italicized combinations indicated CFA antitypes. Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in their attitudinal discrepancy in the issue of homework.

***Discrepancy regarding the issue of chores.*** Similar to previously discussed issues, the combination between the “parent: independent” category and the “adolescent: authoritarian” category, as well as the combination between the “parent: authoritarian” category and the “adolescent: permissive” category had the highest levels of disagreement. In contrast, the combination between the “parent: democratic” category and “adolescent: democratic” category had the lowest levels of disagreement. The CFA types and antitypes did not have notable effects on this outcome.

*Table 24*

*Different Levels of Disagreement on the Issue of Chores Based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Disagreement on chores
Level 1	independent	authoritarian	2.67
	authoritarian	permissive	2.50
Level 2	<b><i>independent</i></b>	<b><i>practical</i></b>	1.33

	social	authoritarian	1.33
	authoritarian	practical	1.32
	practical	practical	1.27
	practical	permissive	1.26
	practical	democratic	1.18
	social	permissive	1.16
	social	practical	1.05
	<b>independent</b>	<b>permissive</b>	0.95
	practical	authoritarian	0.93
	democratic	practical	0.89
	democratic	permissive	0.87
	democratic	authoritarian	0.82
	social	democratic	0.76
	independent	democratic	0.73
Level 3	<b>authoritarian</b>	<b>authoritarian</b>	0.58
	democratic	democratic	0.27

*Note.* Bolded combinations indicated CFA types; bolded, italicized combinations indicated CFA antitypes. Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in their attitudinal discrepancy in the issue of chores. The combination between “parent: authoritarian” and “adolescent: democratic” was excluded from this table because the LS means were inestimable due to small cell frequencies.

***Discrepancy regarding the issue of peers.*** Results of pair-wise comparisons were consistent with the rest of the issues in that families within which both adolescents and parents supported mutual decision making had the lowest levels of parent–adolescent discrepancy in their attitudes towards decision authority in the issue of peers. Notably, adolescents in the “permissive” category tended to have high levels of disagreement with

their parents unless their parents supported mutual decision making (“democratic”) or child-oriented decision making (“independent”) in general. Also, the CFA types and antitypes did not have distinctive effects on this outcome.

Reasons for adolescent conformity also predicted parent–child discrepancy regarding their attitudes towards decision authority on the issue of peers. Adolescents categorized into the “dual” subgroup tended to displayed higher levels of deviation from their parents’ responses (see Figure 7).

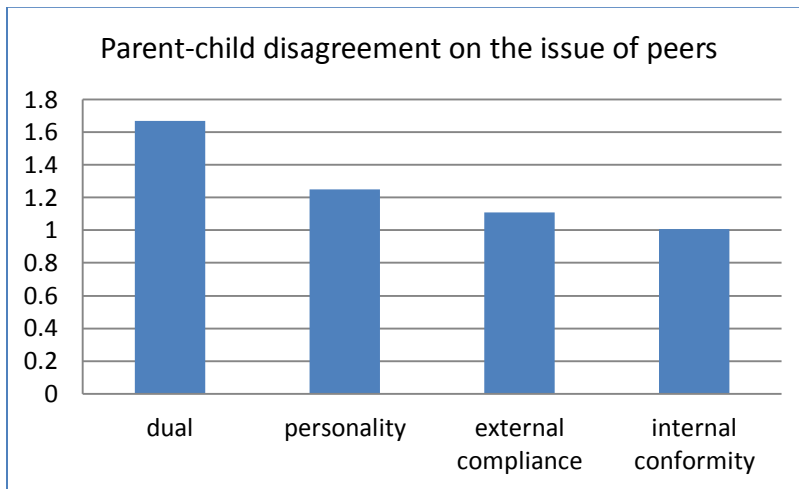
*Table 25*

*Different Levels of Disagreement on the Issue of Peers Based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Disagreement on peers
Level 1	independent	authoritarian	2.31410132
	authoritarian	permissive	2.27920735
	social	permissive	1.9956456
	practical	permissive	1.75574282
Level 2	authoritarian	practical	1.46243912
	democratic	practical	1.40690734
	social	practical	1.3611962
	democratic	authoritarian	1.34549514
	<b><i>independent</i></b>	<b><i>practical</i></b>	1.34338527
	practical	authoritarian	1.26988057
	practical	democratic	1.24737189
	practical	practical	1.18709127
	democratic	permissive	1.12251375
	independent	democratic	1.08391226

Level 3	<b>authoritarian</b>	<b>authoritarian</b>	0.79227922
	social	democratic	0.78584119
	social	authoritarian	0.74645919
	<b>independent</b>	<b>permissive</b>	0.70461171
	democratic	democratic	0.40652975

*Note.* Bolded combinations indicated CFA types; bolded, italicized combinations indicated CFA antitypes. Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in their attitudinal discrepancy in the issue of peers. The combination between “parent: authoritarian” and “adolescent: democratic” was excluded from this table because the LS means were inestimable due to small cell frequencies.

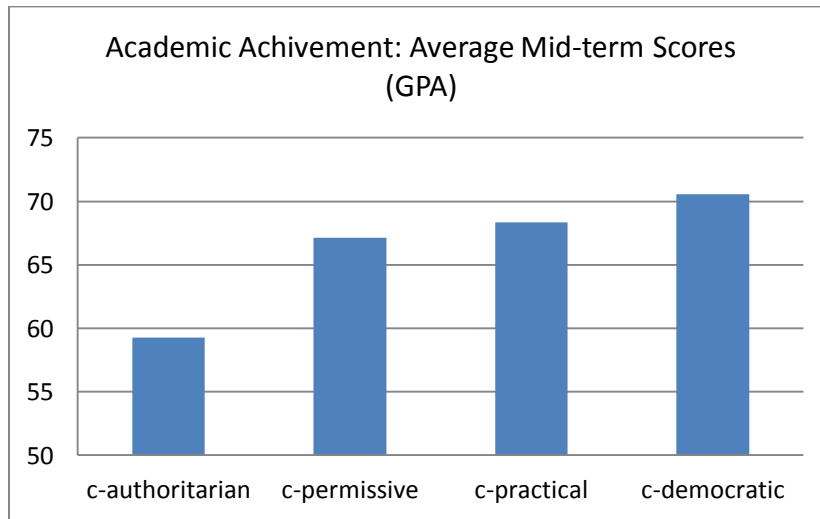


*Figure 7. Parent–Adolescent Disagreement on the Issue of Peers.*

### **Predicting academic achievement.**

Academic achievement was predicted only by adolescent characteristics. First, girls tended to have better academic achievement as indicated by the mid-term scores. Second, adolescents who believed that it was parents who should have decision authority over all issues (“adolescent: authoritarian”) tended to have lower scores than other groups

(see Figure 8).



*Figure 8. The Effects of Reasons of Adolescent Conformity on Adolescent Academic Achievement.*

### **Predicting prosocial orientation.**

Prosocial orientation was marginally predicted by the interaction between typologies of parental attitudes and typologies of adolescent attitudes towards decision authority. The pair-wise comparisons revealed that adolescents in the combination of the “parent: democratic” category and “adolescent: permissive” category had a significantly lower levels of prosocial orientation compared with other combinations. The CFA types and antitypes did not have notable effects on this outcome.

Table 26

*Different Levels of Prosocial Orientation Based on Pair-Wise Comparisons*

Significant comparisons	Typologies of parental attitudes	Typologies of adolescent attitudes	Prosocial orientation
Level 1	democratic	democratic	17.1
	practical	democratic	16.7
	social	authoritarian	16.4
	social	practical	16.3
	independent	authoritarian	16.2
	independent	democratic	16.2
	authoritarian	democratic	16.0
	social	permissive	16.0
	practical	permissive	15.9
	<i>independent</i>	<i>practical</i>	15.8
	<b>authoritarian</b>	<b>authoritarian</b>	15.8
	<b>independent</b>	<b>permissive</b>	15.8
	practical	practical	15.6
	authoritarian	practical	15.6
	democratic	authoritarian	15.5
	authoritarian	permissive	15.5
	practical	authoritarian	15.4
	democratic	practical	15.0
	social	democratic	14.8
Level 2	democratic	permissive	13.8

*Note.* Parent–adolescent combinations within each level were not significantly different from one another but were different from combinations at other levels in adolescent prosocial orientation.



## **CHAPTER VI**

### **DISCUSSION**

The discussion chapter is laid out in six sections. First, a summary of the results is provided. Second, the theme of the project, within-society variability in everyday representations of Confucian concepts of authority in parent–child relationships in China, is revisited. Third, the theoretical and methodological frameworks for exploring this theme are reviewed. Fourth, findings from latent class analysis (LCA), configural frequency analysis (CFA), and general linear modeling (GLM) are discussed in the context of the theoretical framework and linkages to the literature on Chinese and American parent–adolescent relationships. Fifth, findings concerning social class are discussed in connection with Kohn’s (2006) argument regarding the conceptualization and measurement of social class, as well as the association between social class and parenting practices. Finally, limitations of the project are acknowledged, and potential extensions proposed.

#### **Summary of Results**

Major patterns of parental attitudes towards decision authority, parenting practices, adolescent attitudes towards decision authority, and reasons for adolescent conformity across the seven issues (dating, internet café, homework, going out, chores, drugs, and peers), were identified via LCA. The LCA results suggested the existence of distinct subgroups in the population of Chinese parents and adolescents, providing support for the

premise of within-society variability.

The LCA-derived typologies were used in two ways. First, CFA was performed to examine the association between parental and adolescent attitudinal typologies, as well as the extent to which parental and adolescent behavioral typologies went together. Second, GLM was used to link the typologies and their interactions to adolescent outcomes and parent–adolescent disagreement. Results of these additional analyses supported the validity and meaningfulness of the typologies.

I also considered within-society variability in terms of social class. Four social classes emerged from coding of parental occupation and education: a working class, a middle class, a mixed class within which occupation and education did not match (Mixed 1), and a mixed class within which one parent’s social class did not match the other parent’s social class (Mixed 2). Families from different social classes were likely to handle authority issues differently. In fact, CFA results indicated that parents in the Mixed 2 class were particularly likely to belong to the category of “trusting” (trusting about prudential issues and concerned about homework).

### **Authority and Confucianism in Contemporary Chinese Families**

The philosophical question that motivated this project was: to what extent is Confucianism still relevant for Chinese people and salient in parent–adolescent relations in contemporary China? To explore this topic, the study was designed to focus on a central concept in Confucianism: authority. Specifically, in everyday parent–adolescent interactions, who did parents feel should have decision authority for a set of locally relevant issues, and who did the adolescents feel should have decision authority for the

same issues? Also, what strategies did parents use to exercise their authority with respect to setting rules and communicating expectations? What were the reasons for adolescent conformity? Did adolescents obey because they feared parental authority; or did they disobey because they wanted to challenge parental authority?

Those who assume subscription to Confucianism among Chinese people should answer the above questions by eliciting one principle: hierarchy. Given the parent–child hierarchy within the household, parents should take it for granted that parents have decision authority over all issues, and hence would instill such beliefs within their children. In turn, adolescents would behave in ways expected by parents because they would consider it their responsibility to obey. Such are the assumed characterizations of Chinese families consisting of authoritarian parents and submissive, well-behaved children as depicted within Western literature (Chao & Aque, 2001; Ho, 1986; Wu, 1996). A derivative of this assumption is that Chinese children might consider attentive parental monitoring and organization, instead of expressive affection, as indicative of parental love and warmth (Bush, Peterson, Cobas, & Supple, 2002). In other words, compared with typical Western children, Chinese children might have higher thresholds and expectations for parental strictness and authoritarianism.

This characterization, however, suffers from several limitations. First, even though it might characterize some families accurately, it ignores the diversity of China, a geographically vast country with a long history. It might be hard to avoid making generalizations about a country as a whole when the vantage point is cross-cultural comparison. Therefore, a more productive way of assessing this assumption would be to

zoom the lens and focus on within-society variability. Second, it does not take into account, or even confuses, the multiple layers of meanings in the concept of Confucianism. The historical root of Confucianism originated out of an agricultural lifestyle (Feng & Bodde, 1960). Philosophers who advocated for Confucianism argued that the hierarchical system was reasonable because it suited the need for stability and predictability, instead of mobility and fluidity, and because those in authority position were supposed to be more capable and knowledgeable than those in subordinate positions. In other words, the stability of the system relies on those in the upper levels of the hierarchy fulfilling their obligations of leading those in lower levels of the hierarchy. Correspondingly, those in the lower levels of the hierarchy are obliged to follow the leaders in the hierarchy. Yet social representations of Confucianism have typically involved emphasizing obligations of those in subordinate positions without emphasizing the capability and responsibility of those in authority positions (Wang & Anderson, under review). Accordingly, obedience should not be taken for granted as is suggested within philosophical writings. Also, as many areas in contemporary China have abandoned the agricultural lifestyle, strict hierarchical divisions has been relaxed, with role obligations becoming more fluid (e.g., providing for expenses of senior care versus personally tending elderly parents), and social mobility has become more common. Therefore, it is conceivable that the salience of Confucianism in people's everyday lives has declined. Taken together, the image of authoritarian parents and obedient children is unlikely to capture the diversity and sociohistorical changes present within contemporary Chinese society.

Further, Confucianism was developed originally as an account of principles for the literati, the educated class in society. According to classical Confucian writings (Lau, 1979), one had to cultivate one's own inner goodness to understand the truth and become part of the literati, who in turn set an appropriate model for the uneducated mass in reference to rituals and behavioral codes. Thus, the division between the literati and the rest could be translated into differences in interpretation and execution of Confucian principles as a function of social class. There is evidence that people in urban areas have become used to new rituals and adjusting old ones as a result of modern lifestyles and changing government policies in the past few decades (e.g., Zhan, Feng, & Luo, 2008). From this perspective, the modern literati might be more ready to embrace new ways of interpreting and practicing Confucianism along with lifestyle changes as a result of socioeconomic development.

In sum, the prevalence of Confucianism had its historical grounding, but it is expected that the representations of Confucianism in contemporary China have diverged from classical texts. As a result, within-society variability in handling authority issues among parents and adolescent children in contemporary China was explored based on a theoretical and methodological framework that emphasized the interrelatedness within parent–child relationships.

### **Within-Society Variability: Varieties of Belief/Behavioral Patterns**

The theoretical framework for this project was built upon bioecological theory (Bronfenbrenner & Morris, 2006), cultural-ecological theory (Tudge, 2008), and Kohn's theory on social class and personality (Kohn, 2006). Together, these theories were used to

explain the intertwining nature of culture and development. First, culture comprises of the beliefs and practices shared by a group of people who intend, implicitly or explicitly, to transfer those beliefs and practices to the next generation. Thus, the attitudes and practices related to handling authority issues reflect not only personal characteristics and preferences but also cultural influences. In other words, it is appropriate to study culture by examining beliefs and practices of individuals within their everyday lives. Further, the associations between social class and individual beliefs and behavioral patterns can be a productive perspective for understanding the connection between culture and development. Second, individuals are likely to belong to multiple cultural groups. Therefore, within-group variability is expected because individuals receive influences from multiple cultural contexts. Third, the relationship between individuals and cultural contexts is not unilateral, but interdependent. That is, individuals are not only influenced by culture, but also portend and bring about cultural changes in big and small ways. Fourth, development can be understood only by taking into account characteristics of both the developing individual and the people within the immediate context because both are part of the developmental process as they influence and are influenced by each other. A major contribution of this project was to examine both adolescents' and parents' attitudes and practices in handling authority issues in an effort to study adolescents' social development in the context of family relations and cultural influences.

A person-centered approach was adopted to understand and integrate both the parent and the adolescent perspectives. Specifically, LCA was used to reveal patterns of responses across a series of everyday issues in reference to both parents' and adolescents'

attitudes, and both parents' and adolescents' behaviors. Such patterns characterized subgroups in the population as a way to portray within-society variability. Further, the meaning of responses to individual items was grounded in relation to the overall pattern (Bergman & Magnusson, 1997). For example, concerns about homework were perceived differently for parents in the "parent: attentive" versus the "parent: trusting" categories. Hence, the patterns were interpreted as an emergent property that described a developmental profile. In other words, the focus of research was on the subgroups of individuals characterized by a particular profile, rather than a specific issue or variable. Additionally, the interrelatedness of parents and adolescents was explored with CFA by linking subgroups of parents characterized by a particular attitudinal or behavioral pattern with subgroups of adolescents characterized by a particular attitudinal or behavioral pattern. Similar to LCA, the focus of CFA was not on the global associations between the grouping variables. Rather, CFA was used to reveal local associations that indicated which subgroups of parents tended (or not) to coexist with which subgroups of adolescents, which provided another vantage point from which to understand within-society variability (von Eye, 2002).

Taken together, the person-centered approach fit well with the theoretical framework of the project in that it was capable of revealing a number of subgroups that demonstrated distinct developmental profiles or combinations of profiles. Nonetheless, this approach was by no means truly constructive. Instead, it was designed to uncover patterns in structured responses, presuming that the responses represented, to a great extent, developmental characteristics in real life.

## **LCA and CFA Findings**

### **Patterns of parental and adolescent attitudes.**

Five latent classes were identified that were associated with distinct patterns of parental attitudes towards decision authority, and four latent classes were identified for adolescent attitudes. Among the “democratic” parents and adolescents, they tended to believe that all issues should be decided based on mutual discussion. For these subgroups, the emphasis on parent–adolescent communication in parent–adolescent relationships echoed Xia et al.’s (2004) study with a sample of Chinese families. Xia et al. found that parent–adolescent communication was associated positively with parent–adolescent cohesion and negatively with parent–adolescent conflict. In the current study, when both parents and adolescents held “democratic” beliefs within a family, there tended to be less parent–adolescent disagreement across all issues compared with other parent–adolescent combinations. Taken together, parent–adolescent relationship would benefit if both parents and adolescents believed in mutual decision-making.

The “parent: independent” subgroup corresponded with the “adolescent: permissive” subgroup, in that participants reported that they believed adolescents should make their own decisions for the seven issues listed. This kind of attitudes represented a low degree of demandingness in parenting style (Maccoby & Martin, 1983). Furthermore, this parent–adolescent combination was identified as a CFA type, suggesting that parents who believed in independent decision-making by adolescents tended to have children who believed in independent decision-making as well. In other words, when parents demonstrated a low level of demandingness, adolescents tended to find this aspect of



parenting style agreeable.

On the contrary, parents who held “authoritarian” attitudes towards decision authority believed that decision authority should be retained by parents across all issues and demonstrated a high level of demandingness (Maccoby & Martin, 1983). Moreover, they tended to have children who find this aspect of parenting style agreeable according to CFA results. It was unclear, however, whether this subgroup of parents and adolescents subscribed to classical Confucianism or social Confucianism because their attitudes regarding parental responsibility and capability were not assessed in this study. Nevertheless, the combination between parents holding “authoritarian” attitudes and adolescents holding “authoritarian” attitudes was associated with relatively lower academic achievement by adolescents, which supported Ho and Ho’s (2008) argument that authoritarianism was detrimental to children’s cognitive and social development.

The largest subgroup among parents was the “parent: practical” subgroup; and the largest subgroup among adolescents was the corresponding “adolescent: practical” subgroup. These parents and adolescents believed that parents should make decisions over prudential issues, but adolescents should make decisions over personal issues. This pattern supported Smetana and colleagues’ domain theory (Smetana, 1995; Smetana & Daddis, 2002; Smetana et al., 2006). In the current sample, over two thirds of adolescents and over one third of parents demonstrated this pattern, which indicated that it might be the norm for parent–adolescent relationships in this sample, as was posited in domain theory. This pattern, however, was not associated distinctively with any of the outcome indicators in this study. Future studies would be needed to probe the meaning of this kind

of attitudes towards decision authority for parents and adolescents.

Finally, there was an additional latent class for parents, namely, “parent: social”. Among this subgroup of parents, they were particularly concerned about socially related issues and not so concerned about the issues of homework and chores. In other words, their definition of personal issues for adolescents was limited to homework and chores. Perhaps it was related to their interpretations of cultural expectations. Perhaps it was because these parents considered their children to be vulnerable to social influences. These speculations would be worth examining because this subgroup constituted over one fourth of the sample.

#### **Decision authority: Progress from Smetana’s domain theory.**

Smetana and colleagues (Smetana, 1995; Smetana & Daddis, 2002; Smetana et al., 2006) conducted a series of studies on adolescents’ attitudes towards decision authority and found that adolescents tended to believe that parents should have decision authority regarding issues in prudential or conventional domains, but adolescents themselves should have decision authority over issues in the personal domain. Also, there were issues for which parents and adolescents tended to be ambiguous about their roles in decision making, and those issues were categorized into the multifaceted domain. This project moved beyond this line of research on domain theory by studying the patterns of opinions over all issues holistically, by revealing multiple plausible patterns that suggested within-society variability, and by incorporating both parents’ and adolescents’ perspectives.

First, LCA allowed response patterns to emerge by modeling responses to all items simultaneously. This represents a methodological improvement from previous

studies in that the latent models not only accounted for measurement errors in responses for individual items, but also estimated the response probabilities for each item in the context of responses to other items. In previous studies, responses to each item were assumed to be independent and the possibility (reality) of measurement error was ignored. Additionally, using LCA to examine the response patterns made possible theoretical improvements for domain theory. A relatively large percentage of participants were classified into the “practical” categories, which meant that these participants were the majority and explained why the “practical” pattern was represented as the only pattern in previous studies. Nonetheless, LCA revealed other smaller, but salient groups characterized by their own distinct patterns. Consequently, domain theory could be extended to account for alternative patterns so as to be able to describe and explain cultural diversity.

Second, although it was speculated that adolescents and parents might differ in their definitions of personal issues (Smetana et al., 2006), few studies have examined, compared, and integrated the perspectives of adolescents and parents simultaneously. In this project, parents and adolescents, respectively, reported on their attitudes towards decision authority for a list of issues that were believed to cover the prudential, personal, and multifaceted domains. LCA revealed that parents and adolescents demonstrated overlapping patterns. Specifically, patterns characterized by “democratic,” “authoritarian,” “practical,” and “independent” decision making were identified for both parents and children. Moreover, a subgroup of parents demonstrated a distinct pattern in which they were concerned primarily with socially related issues, such as dating, going out, and

peers. Notably, only about 37% of parents and 49% of adolescents belonged to the “practical” pattern as posited in domain theory. In other words, adolescents and parents in other subgroups had different ideas regarding what constituted personal issues because, strictly speaking, personal issues should be those for which adolescents made decisions on their own. Accordingly, adolescents and parents in different subgroups might have different ideas regarding the need for and extent of autonomy granting (Smetana & Daddis, 2002)

Further, results of CFA suggested that the parental perspectives did not fully correspond with adolescent perspectives within the same families, except for the subgroups that believed in “independent”/ “permissive” decision making and the subgroups that believed in “authoritarian” decision making. This finding had implications for the literature on both parenting and culture. In terms of parenting, this study provided evidence that parents and adolescents did not necessarily think in the same way (Steinberg, 2001), especially for the parents in the “democratic,” “practical,” and “social” subgroups. In contrast, the two more extreme subgroups, one that supported full-swing authoritarian decision making and one that supported full-swing independent decision making, tended to have adolescent children with similar attitudes. This begs the question of whether it is more important for researchers to identify and advocate the “most appropriate” way of parenting for parents versus proposing that parents should try to resolve the differences between their own attitudes and their children’s attitudes. In addition, the disagreement within the “parent: democratic” and “adolescent: practical” subgroups might not be problematic, but the disagreement within the “parent: social” and

“adolescent: permissive” subgroup might result in significant parent–adolescent conflict in handling socially related issues. In terms of culture, cultural-ecological theory posits that children do not simply copy what parents think or do (Tudge, 2008). In the process of culture being transmitted from the older generation to the younger generation, part of it is retained, and part of it is transformed or abandoned. In other words, parent–adolescent divergence in their beliefs could be a catalyst or indicator of cultural change.

### **Patterns of parenting practices.**

Four latent classes of parenting practices were identified. Differing from previous studies on parental strictness-supervision (e.g., Gray & Steinberg, 1999), the latent classes represented how parental supervision was exercised, rather than the degree to which parents provided supervision. Specifically, “reasoning” parents used reasoning to communicate their rules, which was consistent with descriptions in classical Confucianism; “trusting” parents focused on homework issues and provided little or light supervision in other issues; “laid-back” parents never really talked about rules (although could have communicated their rules implicitly, which was different from not having rules at all); and “attentive” parents stayed involved in all issues of their children’s lives. As such, “attentive” parents demonstrate a high degree of strictness-supervision, which was an integral aspect of both authoritative and authoritarian parenting styles. Another aspect of parenting style, acceptance-involvement, was not explicitly assessed in the measure of parenting practices. As virtually no parents resorted to parenting practices that were associated with low acceptance such as loudly demanding and punishment, this sample of parents demonstrated a high degree of acceptance. Also, these four latent

classes of parenting practices represented different ways of involvement instead of different degrees of involvement. Taken together, it was likely that acceptance-involvement was intertwined with strictness-supervision (Wang & Supple, 2010).

### **Progress from research on parenting style.**

Although parenting style has been conceptualized as the overarching emotional climate provided by parents (Darling & Steinberg, 1993), it has traditionally been measured by summing responses across items assessing parenting practices and artificially dividing samples using median split (e.g., Steinberg et al., 1994). In this project, LCA was applied to uncover patterns of parenting practices across various issues. This approach was a better representation of the empirical data because the patterns were allowed to emerge from the data without setting threshold points (e.g., medians) that might not be theoretically relevant. Therefore, parenting styles would be better captured with LCA-derived patterns of parenting practices than categories based on median splits of summary scores. Consequently, the meaning of parenting practices regarding a particular issue was determined by considering parenting practices across all other issues. By the same token, parenting styles provided the overarching context within which parenting practices are exercised.

In addition, the concept of culture needed to be incorporated into the study of parenting practices and parenting styles. First of all, specific parenting practices should be relevant to the specific cultural contexts of participants. To achieve this goal within the current study, participant responses were used to generate questionnaire items and response options. Consequently, the issues of internet café and dating, which did not

appear within the Western literature (e.g., Smetana et al., 2006), were included in the questionnaire. Second, a cultural perspective emphasized the interrelatedness and mutual influences between parents and children. Therefore, whereas a collection of parenting practices item might be used to represent parenting style, it was important for researchers to consider how the emotional climate within parent–child relationships is created by parents as well as how it is received by children. In sum, a dyadic or relational approach is helpful for studying parenting style as a cultural phenomenon. Third, a cultural perspective emphasizes contextual influences and diversity. Within a particular society, a variety of patterns could emerge. Between different societies, overlapping or distinct patterns are possible. For example, in the current sample of participants residing in a southern Chinese metropolis, four patterns of parenting practices emerged: “reasoning,” “trusting,” “laid-back,” and “attentive.” Except for the “laid-back” subgroup, all the other three groups could potentially score high on the monitoring dimension, yet these three groups were distinct enough that they were associated with adolescent characteristics differentially. Also, adolescents seldom reported that their parents used scolding or nagging, which suggested that rarely were parents engaged in psychological control. Taken together, theories on parenting practices and parenting style would benefit by not using a single pre-established measurement stick for diverse groups. Finally, using LCA and CFA to identify patterns of parenting practices might be more productive for yielding parenting style categories than arbitrarily dividing samples based on median split of summary scores of parenting practices.

**Reasons for adolescent conformity: Extension of research on conformity.**

In Peterson et al.'s (1985) study, reasons for adolescent conformity were assumed instead of probed. That is, the authors considered adolescents' conforming behaviors to be due to external compliance in the presence of parents or due to internal conformity when they responded to questionnaire in private. In contrast, adolescents in this study were asked to report on their reasons for conforming or non-conforming for each specific issue, and they were allowed to select multiple reasons for an individual issue. As a result, the methodology adopted in this project was more likely to capture real life scenarios.

Specifically, the "external compliance" subgroup fit well with characteristics of social Confucianism based on which adolescents took obedience for granted because these adolescents suggested that they should do what their parents told them to. In contrast, the "internal conformity" subgroup fit well with the concept of self-cultivation in China in that adolescents behaved based on their own internalized values. They conformed because they agreed with their parents and thought that their parents were right; they did not conform because they disagreed with their parents and thought that their parents were wrong. According to *Analects* (Lau, 1979), Confucius recognized that sometimes parents could be wrong, and children had the responsibility to dissuade parents from doing wrong. As such, it was not suggested in classical Confucianism that parents were always right and children should obey blindly. Ideally, parents would represent and teach the right values which children would internalize through self-cultivation. Further, results of CFA indicated that "reasoning" parents were more likely to have children characterized by "internal conformity," which represented cultural values



advocated in classical Confucianism and was consistent with findings in Henry et al. (1989). However, this combination was not related to any of the outcome indicators in the present study. Follow-up studies can focus on which developmental outcomes are of interest to those families.

Additionally, explanations other than external compliance and internal conformity were considered. In fact, among the four patterns that emerged, “external compliance,” “personality,” “dual,” and “internal conformity,” two of them did not strictly follow the theoretical stipulations. Notably, the “personality” subgroup indicated they were well-behaved because it was their personality. For example, they did not date because they were not interested in dating, rather than because they were trying to make their parents happy. Similarly, the “dual” group was most likely to believe that their behaviors were based on their own judgment while recognizing that they would take into account their parents’ opinions on issues like internet café and drugs. Again, these results suggested that Chinese adolescents did not uniformly consider it their obligation to conform.

The reasons for adolescent conformity were the primary focus of the current study. By selecting reasons, adolescents indicated whether or not they behaved as expected by parents or obeyed parental rules. For example, adolescents were allowed to choose between “I obeyed because I considered my parents were reasonable” and “I disobeyed because I considered my parents to be unreasonable.” Examination of the data indicated that few adolescents selected options indicating non-conformity. Further, analysis of adolescent reports suggested that most adolescents behaved in accordance with parental expectations. In sum, the adolescent participants were well-behaved, at least for the

issues included in the study.

## **Predicting Adolescent Psychosocial Outcomes**

### **Parent–child discrepancies in attitudes towards decision authority.**

In general, when parents held authoritarian attitudes but adolescents supported permissive decision making, dyads tended to have relatively higher levels of disagreement on specific issues, in that adolescents tended to be less likely to endorse parent-oriented decision authority than were their parents. This finding echoed those of Smetana et al. (2006) who concluded that, compared with adolescents themselves, parents were more likely to consider adolescents as obligated to disclose to parents. Nevertheless, the opposite scenario was observed as well. In other words, high levels of parent–child disagreement could also occur because children considered it more appropriate for parents to be the decision maker whereas parents were ready to allow adolescents to make decisions for themselves. Still, for parents and adolescents with compatible attitudes, either both believing in parent-oriented decision authority or both believing in child-oriented decision authority, there were low levels of disagreement. These results extend Smetana's conclusions with information on within-society variability. Moreover, the most extreme discrepancy scores existed in parent and adolescent typologies characterized by uniform, rather than domain specific, attitudes towards decision authority.

As such, questions remain regarding whether researchers and practitioners should advise parents about universal best practices or focus on goodness-of-fit between parents and children. Focusing on goodness-of-fit between parent and adolescent characteristics

is based on the assumption that parent–adolescent disagreement is problematic, which is not necessarily true. In contrast, if one recognizes that disagreement is a natural part of parent–adolescent relationships as it occurs across all issues for all kinds of parent–adolescent combinations, more attention should be paid to promoting parent–adolescent relationships and adolescent development in the context of parent–adolescent discrepancy. In terms of best practices, they might be issue specific, situation specific, and family specific. As noted by Grusec, Goodnow, and Kuczynski (2000), the key to effective parenting is not specific strategies, but rather understanding of child and situation characteristics together with flexible actions.

Typologies of parenting practices did not predict discrepancies in attitudes, which could be due to the fact that parenting practices and parenting attitudes were not necessarily in accord with each other. Post hoc CFA analyses for linkages between parenting practices and parenting attitudes were conducted and suggested neither local nor global associations. Nevertheless, typologies of reasons for adolescent conformity were associated significantly with parent–child discrepancies in attitudes towards decision authority related to peer issues. Specifically, adolescents in the “dual” subgroup, who recognized both parental and adolescent authority in impacting behavior, tended to have higher levels of disagreement with their parents in peer issues compared with the other three subgroups. Compared to other subgroups, this subgroup of adolescents did not have a consistent principle in terms of whether and when to listen to parents, which might be the reason for the high levels of discrepancy on a multifaceted issue such as peers.

### **Academic achievement.**

Contrary to typical findings in the literature on Chinese parenting and children's academic achievement (e.g., Chao & Aque, 2009; Wang, Pomerantz, & Chen, 2007), parenting practices did not predict adolescent academic achievement in this study. Moreover, adolescents who supported parent-oriented decision authority were likely to have the lowest academic test scores. This finding was consistent with recent arguments for a refreshed perspective on Chinese children's academic achievement. First, according to Ho and Ho (2008), authoritarianism is detrimental to children's creativity and self-motivation in China. Second, Li (2006) argued that academics should belong in the personal domain for Chinese people based on traditional Confucian principles, whereas social relations should reflect collectivistic principles. On the one hand, interdependence between family members and community members is emphasized, and personal achievement is rendered part of family glory. On the other hand, the actual process of achieving in academics is taken as a personal endeavor. Indeed, it was always postulated in classical Confucian texts that individuals should be engaged in self-cultivation, which was intended to be a lonely, strenuous, but nonetheless rewarding, process.

### **Social competence: Sociability and prosocial orientation.**

Although previous studies suggested parenting had an effect on adolescents' emotional functioning (Wang, Pomerantz, & Chen, 2007), sociability was not associated with any of the predictors, whereas prosocial orientation was only marginally predicted by the interaction between parental attitudes and adolescent attitudes. Perhaps skills and lessons learned in parent-adolescent interactions were not applicable to the peer context

for the current sample of adolescents who were in 7<sup>th</sup> and 8<sup>th</sup> Grades.

Finally, the CFA types and antitypes were not associated with the outcome indicators. As CFA revealed relationship-level properties in parent–adolescent relationships, the types and antitypes might be more likely to be associated with variables indicating characteristics of parent–adolescent relationships, such as parent–child communication and family warmth.

### **Social Class**

Four social class groups were identified within the current sample: middle-class families within which both parents held middle class level occupations and had middle-class level education, working-class families within which both parents held working-class level occupations and had working-class level education, mixed-class families within which one parent was classified as middle class but the other was classified as working class, and a second mixed class within which one or both parents had middle class experiences in either occupation or education, but not both areas.

Other researchers have also reported overlapping but distinct social class categories across diverse contexts. For example, Chin and Phillips (2004) identified middle-class, working-class, and poor families in a sample of California residents. Kohn et al. (2007) had seven occupation categories for their research in Poland, Ukraine, and China: employers, self-employed, managers, supervisors, experts, non-manual workers, and manual workers, which in turn were coded into middle class versus working class depending on the extent of self-directedness afforded on the job. Compared with previous studies, in which occupation was used as the major indicator of social class, the coding

scheme for the current study was intended to retain the theoretical distinction between working class and middle class, to take into account both components (occupation and education) in the theoretical conceptualization of social class, and to strive for relevance to the specific context in which data collection took place. The resulting four social class categories suggested that the sample over represented the working-class sector of the population.

Nevertheless, the families of Mixed 2 class in which individuals education and occupation levels did not match, was shown to have interesting properties. CFA models suggested that parents in this social class were more likely to demonstrate the “trusting” pattern of parenting practices. That is, they trusted their children in reference of prudential issues, but tried to be highly involved (nagging) in children’s academic work. Of the 19 families in this configuration, 17 had parents with a middle-class occupation but a working-class education (no more than 12 years). Presumably they were mostly concerned about their children’s academic performance perhaps because they hoped the next generation could have a breakthrough in terms of moving up the social class ladder (i.e., middle class). In addition, they were not concerned about problems with prudential issues such as internet café or drugs perhaps because those issues were likely to be a concern for more disadvantaged families (i.e., working class). Finally, when trying to get involved in other issues (e.g., peers, chores), they tended to use reasoning to communicate their expectations and showed respect for their children, which was consistent with their middle-class experiences in their occupations.

Contrary to expectations based on Kohn's (2006) theory, middle-class parents were not more likely to use "reasoning" that was supposed to encourage independent thinking, and working-class parents were not likely to be "attentive" which would suggest exerting behavioral control over children's lives. Moreover, virtually no parents, as reported by their adolescent children, were engaged in being loudly demanding, providing close surveillance, and to a lesser extent, nagging. In addition, family social class, which was based on parental characteristics, was not associated with any of the adolescent outcomes. The associations among social class, parental personality, and parenting, might be more complex than suggested by Kohn when social class was indicated by both occupation and education instead of occupation alone.

One factor that Kohn's research did not take into account was the rapid development in the accessibility of information for people from all backgrounds in urban areas (National Bureau of Statistics of China, 2012). For example, most people have access to cell phones and the Internet. Information can be exchanged instantly at a large scale via calling, text messaging, and social networking sites on the Internet. Overall, people from all walks of life have a great deal of power over obtaining and using information from multiple sources. Thus, the extent to which self-directedness was afforded in one's education or occupation might not be as important as before.

### **Confucian-style Attitudes and Practices: How Salient?**

Results of this project indicated that neither the classical Confucianism nor social Confucianism accurately characterized parent-adolescent relationships among this sample of participants. On the one hand, parents holding "authoritarian" attitudes tended

to have children who also held “authoritarian” attitudes, which was consistent with parent–child relationships typically depicted in social Confucianism. This subgroup of participants, however, accounted for no more than 15% of the sample. Thus, the assumption about the prevalence of social Confucianism in China, which was characterized by authoritarian parents and submissive children, was not supported (see Hwang, 2001). On the other hand, the subgroup of parent–adolescent dyads consisting of “reasoning” parents and adolescents demonstrating “internal conformity”, which was consistent with parent–child relationships featured in classical Confucianism, only accounted for about 18% of the sample. Hence, the prevalence of classical Confucianism in China was not found, either.

Nevertheless, issues considered important in Confucianism according to preliminary interviews, such as manners and respect for elders, were not included in latent class modeling to identify the behavioral patterns in an attempt to compromise for the survey measure on attitudes. Therefore, the claims made in this project about the relevance of Confucianism are more rhetorical than factual.

### **Future Directions**

To conclude, this study examined within-society variability in attitudes and practices in handling authority issues among a sample of adolescents and their parents residing in southern China. LCA identified parental and adolescent subgroups that were characterized by distinct patterns of attitudes and practices. CFA suggested that compatible subgroups tended to go together, and compatible parent–child combinations tended to be associated with less disagreement. Finally, adolescent academic achievement



was only predicted by child characteristics, but not parental characteristics, and adolescent social competence was barely predicted by indicators of the attitudes and behaviors displayed in parent–child relationships when handling authority issues.

This project could be replicated and extended in multiple ways in the future. First, a more diverse and representative sample could be drawn in the same area as well as other areas in China. Validity of the LCA-derived typologies would be supported if overlapping typologies were revealed in a different sample. Moreover, with more middle class participants in the sample, there will be more statistical power to address the speculation regarding whether Confucianism is more relevant to the literati. A key distinction between the literati and ordinary workers is that the literati are the educated class. As such, taking into account both education and occupation is necessary to study social class variability in cultural values and practices related to Confucianism in China. Therefore, future studies will benefit to continue using the social class coding system adopted in the current project with a more balanced sample across the four social class categories. Such studies also will have the potential for a proper test of Kohn's (2006) theory on the linkage between social class and individual personality.

Second, future studies need to consider a wider variety of concepts in Confucianism other than authority so as to have a better representation of Confucianism as an ideology. Within parent–child relationships, a central concept, filial piety, as well as a related concept focusing on child development, self-cultivation, will present a fruitful direction for research exploration. Also, it will contribute to research in family studies to examine to what extent the Confucian-style co-parenting relationship, which was

described in the *Analects* as a combination of strict fathers and gentle mothers, is relevant among contemporary Chinese families.

Third, systematic, intensive, and prolonged observations of people's everyday lives will provide a more meaningful portrait of cultural ideologies and practices. Ideally, a carefully selected sample of participants are observed by researchers who follow the participants around their everyday activities and at the same time share the experiences and discuss with participants the meanings behind such experiences. Such studies with a constructivist methodology will be consistent with the contextualist theoretical framework proposed in the current project.

Finally, follow-up studies with the same participants when they are in high school and even when they become parents will provide precious insight in both developmental and cultural change. To a lesser extent, cohort studies with separate age groups of participants will shed light on changes in cultural values and practices as well.

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## APPENDIX A

### QUESTIONNAIRE FOR PARENTING PRACTICES AND REASONS FOR ADOLESCENT CONFORMITY

Rules	How rules are communicated / enforced?	Do you follow the rules? (Do you listen to parents?)	Why/why not?
(1)No dating	a. never really talked about it b. peaceful reasoning and explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking rules g. stalking, escorting h. parents do not have such a rule	a. yes b. sometimes c. basically no	a. because I should do what my parents want me to do b. this is my personal thing, none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable e. I am not interested in it, it has nothing to do with my parents f. I cannot control myself g. other, please explain:
(2)no internet café	a. never really talked about it b. peaceful reasoning and explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking rules g. stalking, escorting h. parents do not have such a rule	a. yes b. sometimes c. basically no	a. because I should do what my parents want me to do b. this is my personal thing, none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable e. I am not interested in it, it has nothing to do with my parents f. I cannot control myself g. other, please explain:

(3)spend more time on homework	a. never really talked about it b. peaceful reasoning and explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking rules g. sit with me working on my homework together, check my homework every day h. parents do not have such a rule	a. yes b. sometimes c. basically no	a. because I should do what my parents want me to do b. this is my personal thing, none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable e. I am interested in studies myself, it has nothing to do with my parents f. I am not interested in studies, or I find things too difficult for me. g. other, please explain:
(4)come home on time when go out	a. never really talked about it b. peaceful reasoning and explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking rules g. constantly calling h. parents do not have such a rule	a. yes b. sometimes c. basically no	a. because I should do what my parents want me to do b. this is my personal thing, none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable e. I just don't like it myself, it has nothing to do with my parents f. My friends do not want to come home too early, so I can't leave earlier than everyone else g. other, please explain:
(5)stay away from delinquent	a. never really talked about it b. peaceful reasoning and	a. yes b. sometimes c. basically	a. because I should do what my parents want me to do b. this is my personal thing,



peers	explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking rules g. close surveillance h. parents do not have such a rule	no	none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable e. I am just not interested in those people myself, it has nothing to do with my parents f. My parents do not know about my friends, or about adolescent friendship g. other, please explain:
(6)do housework chores	a. never really talked about it b. peaceful reasoning and explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking rules g. parents do not have such a rule	a. yes b. sometimes c. basically no	a. because I should do what my parents want me to do b. this is my personal thing, none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable e. I like doing it myself, it has nothing to do with my parents f. I don't have time, or I am too tired for it. g. other, please explain:
(7) no smoking and no drugs	a. never really talked about it b. peaceful reasoning and explaining c. loudly demanding d. nagging e. reward for following rules f. punishment for breaking	a. yes b. sometimes c. basically no	a. because I should do what my parents want me to do b. this is my personal thing, none of their business c. I agree with my parents, I think they are reasonable d. I do not agree with my parents, I don't think they are reasonable

	rules g. close surveillance h. parents do not have such a rule		e. I am not interested in myself, it has nothing to do with my parents f. I cannot control myself. g. other, please explain:
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## APPENDIX B

### SOCIAL CLASS CODING SCHEME

Definition: social class is defined by ownership and control of the means of production. It is characterized by experience of self-directedness in one's education and occupation.

#### Coding of occupation

1. Occupation is coded into two categories: middle class and working class. Middle-class occupations include employers, manager and supervisors, experts and skilled workers. Working-class occupations include manual workers and unskilled workers who are engaged in routinized work that doesn't allow much autonomy and self-directedness. Based on my formal and informal interviews with the participants, self-employed is classified to be working class because in the present sample, self-employed generally refer to those who have to find sporadic work because they are not capable of obtaining a decent, stable job. For example, a man who offers moving services with his own motorcycle without a proper license would call himself self-employed.
2. Unemployed is defined as those who are out of employment and who are looking for gainful employment.
3. Homemaker is defined as those who do not participate in the labor force and who are not looking for jobs.
4. Both parents' occupations are coded separately.

#### Coding of education

1. Considering the cohort of parents (around age 40), middle-class education includes graduates of , associate degree, bachelor's degree or higher (i.e., 14 or more years of education). In sum, a middle-class education is one that equips graduates with professional skills and allows graduates to be employed in middle-class occupations.
2. Those with less than a middle-class education are coded as working-class education.
3. Both parents' education levels are coded separately.

Coding of family social class:

1. Middle class families: both parents are middle class by education and at least one parent is middle class by occupation.
2. Working class families: both parents are working class by education; one or both parents have a working class occupation or are unemployed; neither parent can have a middle class occupation.
3. Mixed social class families (1): one parent is working class and the other is middle class
4. Mixed social class families (2): middle class education + working class occupation (unemployed) or working class education + middle class occupation for one or both parents.

	Parent (1) education	Parent (2) education	Parent (1) occupation	Parent (2) occupation
Middle class	M	M	M	(M) (W)(U)(H)
Working class	W	W	W/U	(W/U)(H)
Mixed (1)	M	W	M	W
Mixed (2)	M(W)	M(W)	W/U(M)	W/U(M)

5. Others will be coded as unclassified.
6. An extremely small portion of the parents are divorced or widowed, in which case family social class will be coded based on the participating parents' occupation and education.
7. If information on occupation and education status is available for only one of the parents even though their marital status is "married," family social class will be coded based on that one parent's information.
8. Families will not be coded if information is missing in either occupation or education for both parents.